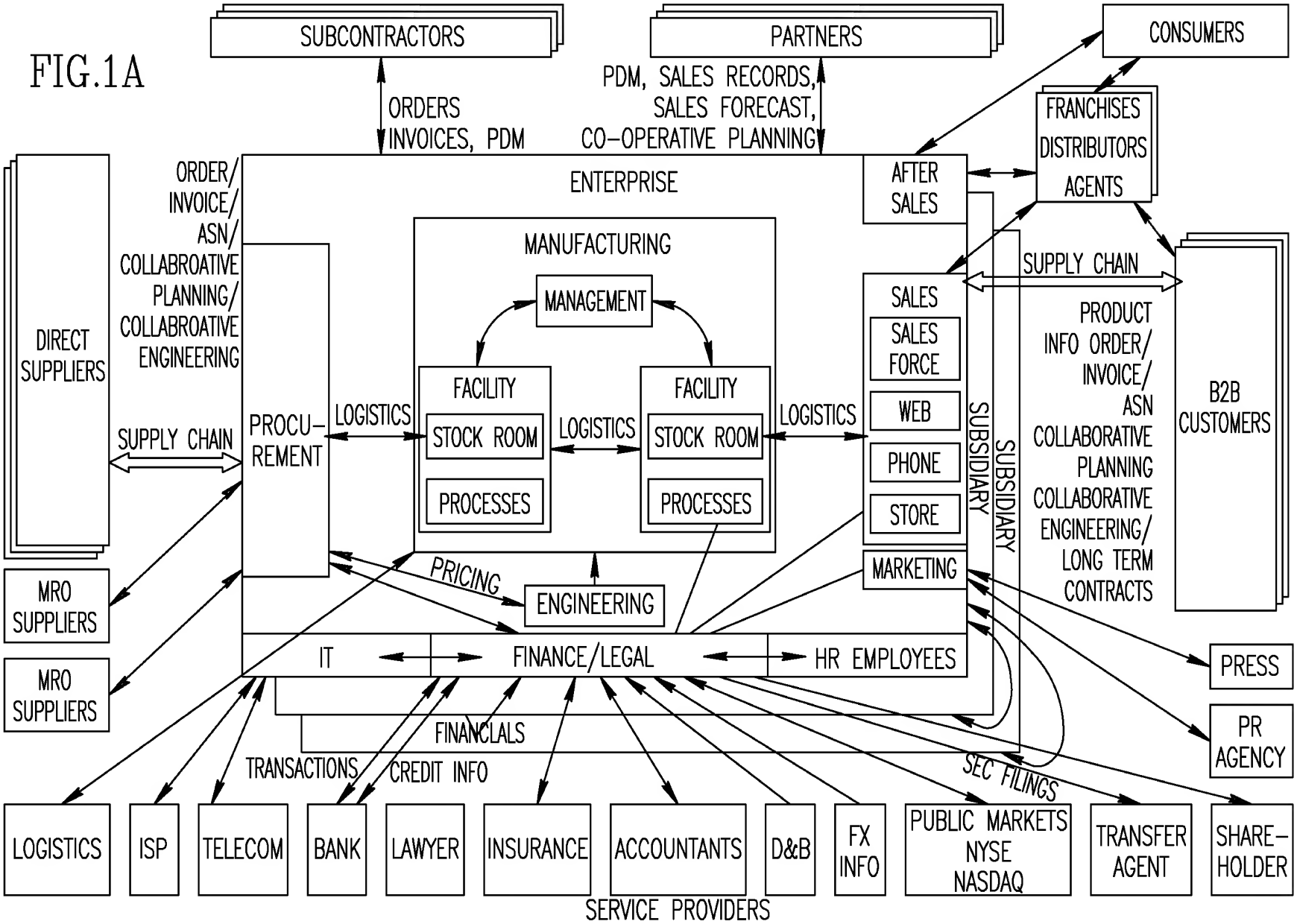
FIG.1A


SUBCONTRACTORS
PARTNERS
CONSUMERS
ORDERS
INVOICES, PDM
PDM, SALES RECORDS,
SALES FORECAST,
CO-OPERATIVE PLANNING
FRANCHISES
DISTRIBUTORS
AGENTS
ENTERPRISE
AFTER SALES
ORDER/
INVOICE/
ASN/
COLLABROATIVE
PLANNING/
COLLABROATIVE
ENGINEERING
MANUFACTURING
SUPPLY CHAIN
DIRECT SUPPLIERS
MANAGEMENT
SALES
SALES FORCE
WEB
PHONE
STORE
PRODUCT
INFO ORDER/
INVOICE/
ASN
COLLABORATIVE
PLANNING
COLLABORATIVE
ENGINEERING/
LONG TERM
CONTRACTS
B2B CUSTOMERS
SUPPLY CHAIN
PROCU-
REMENT
LOGISTICS
FACILITY
STOCK ROOM
PROCESSES
LOGISTICS
FACILITY
STOCK ROOM
PROCESSES
LOGISTICS
SUBSIDIARY
SUBSIDIARY
MARKETING
PRICING
ENGINEERING
MRO SUPPLIERS
MRO SUPPLIERS
IT
FINANCE/LEGAL
HR EMPLOYEES
PRESS
PR AGENCY
FINANCIALS
TRANSACTIONS
CREDIT INFO
SEC FILINGS
LOGISTICS
ISP
TELECOM
BANK
LAWYER
INSURANCE
ACCOUNTANTS
D&B
FX INFO
PUBLIC MARKETS
NYSE
NASDAQ
TRANSFER AGENT
SHARE-
HOLDER
SERVICE PROVIDERS

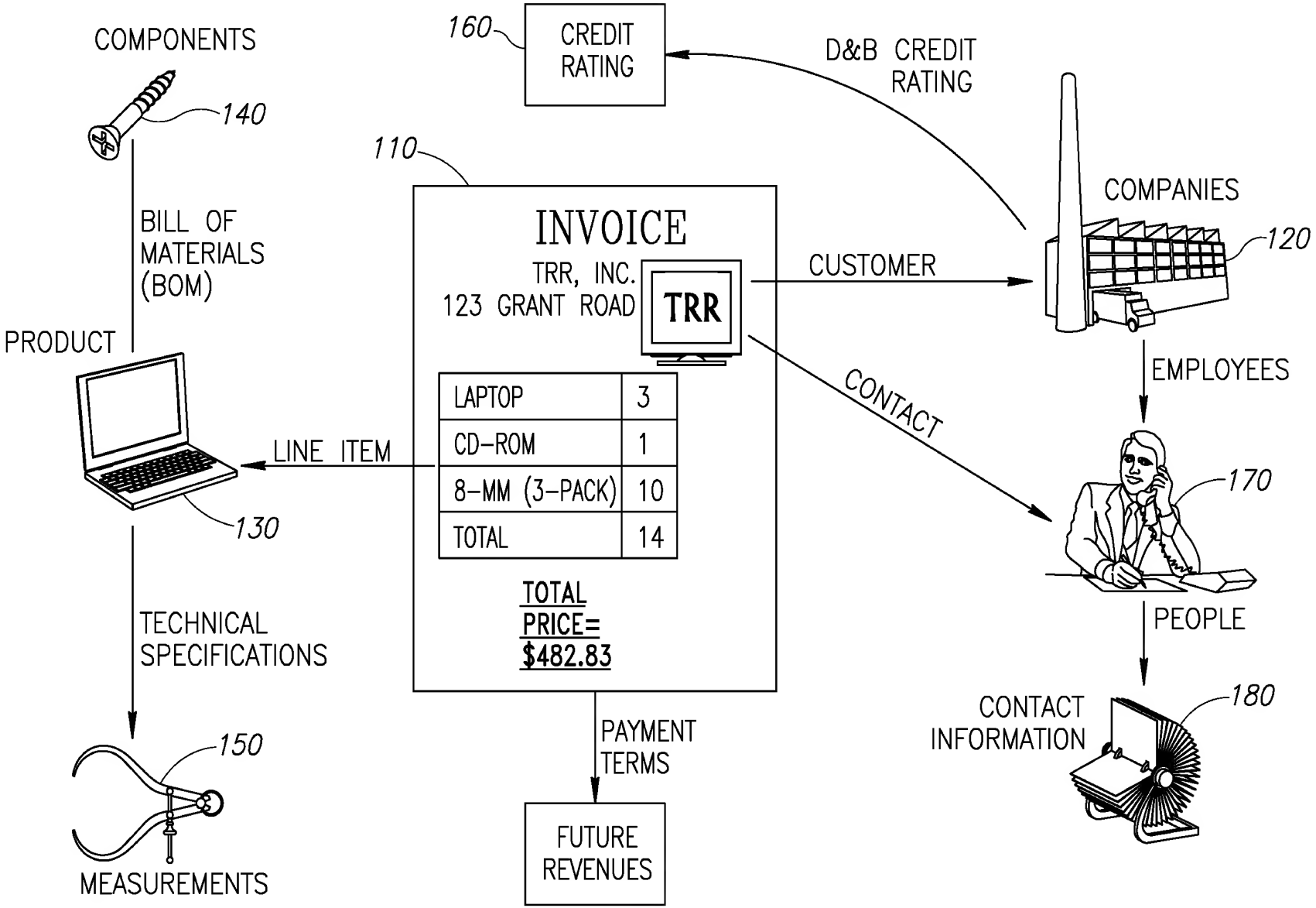

COMPONENTS
140
BILL OF MATERIALS (BOM)
PRODUCT
130
TECHNICAL SPECIFICATIONS
150
MEASUREMENTS
160
CREDIT RATING
D&B CREDIT RATING
110
INVOICE
TRR, INC.
123 GRANT ROAD
TRR
CUSTOMER
LINE ITEM
LAPTOP 3
CD-ROM 1
8-MM (3-PACK) 10
TOTAL 14
TOTAL PRICE= $482.83
PAYMENT TERMS
FUTURE REVENUES
COMPANIES
120
EMPLOYEES
CONTACT
170
PEOPLE
CONTACT INFORMATION
180

FIG.1B

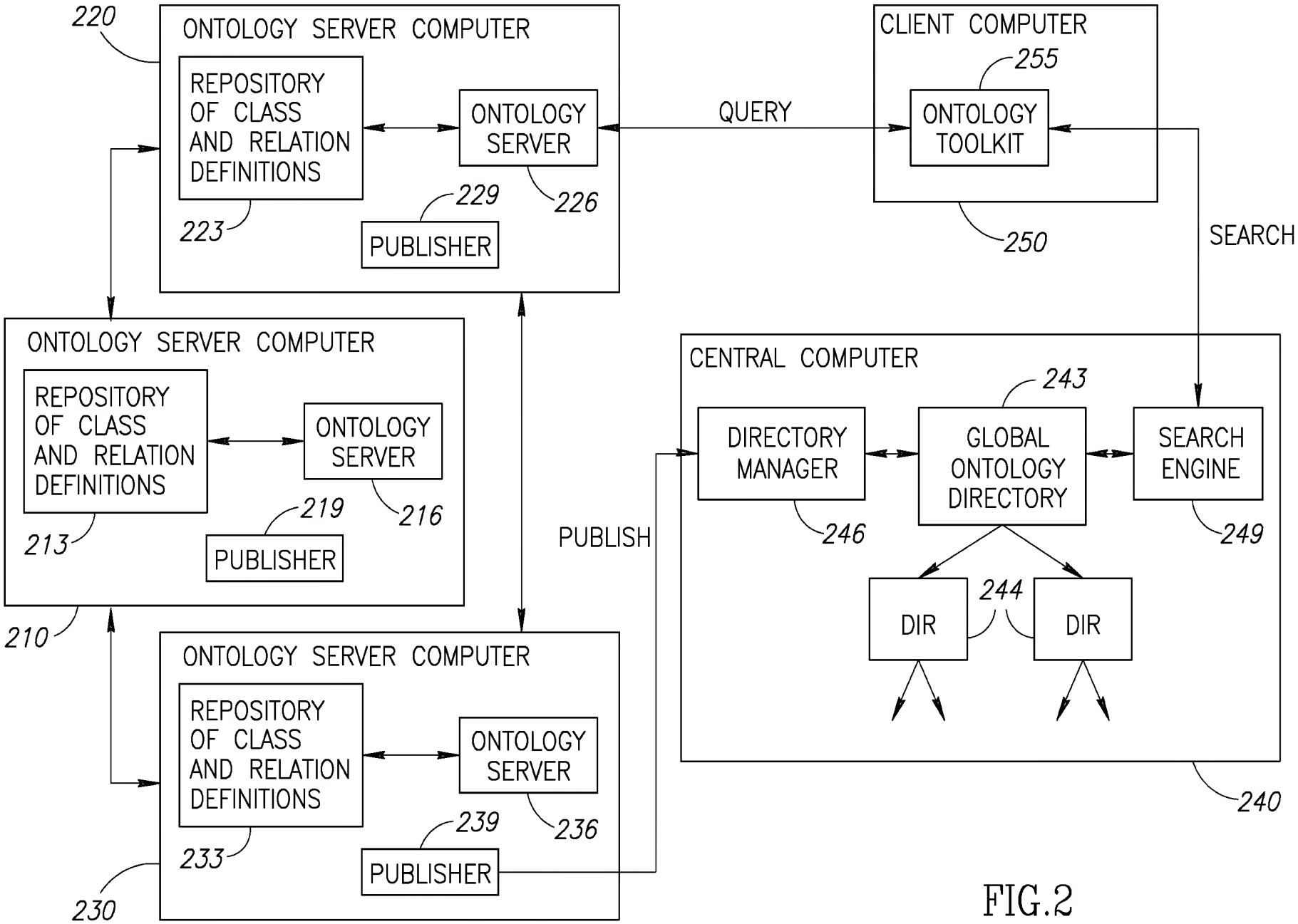

220
ONTOLOGY SERVER COMPUTER
REPOSITORY OF CLASS AND RELATION DEFINITIONS
ONTOLOGY SERVER
223
229
PUBLISHER
226
QUERY
CLIENT COMPUTER
255
ONTOLOGY TOOLKIT
250
SEARCH
ONTOLOGY SERVER COMPUTER
REPOSITORY OF CLASS AND RELATION DEFINITIONS
ONTOLOGY SERVER
213
219
PUBLISHER
216
210
CENTRAL COMPUTER
243
DIRECTORY MANAGER
GLOBAL ONTOLOGY DIRECTORY
SEARCH ENGINE
246
249
244
DIR
DIR
240
PUBLISH
ONTOLOGY SERVER COMPUTER
REPOSITORY OF CLASS AND RELATION DEFINITIONS
ONTOLOGY SERVER
233
239
PUBLISHER
236
230

FIG.2

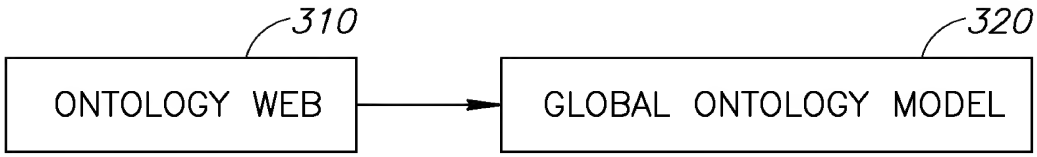

310
320
ONTOLOGY WEB
GLOBAL ONTOLOGY MODEL

FIG.3

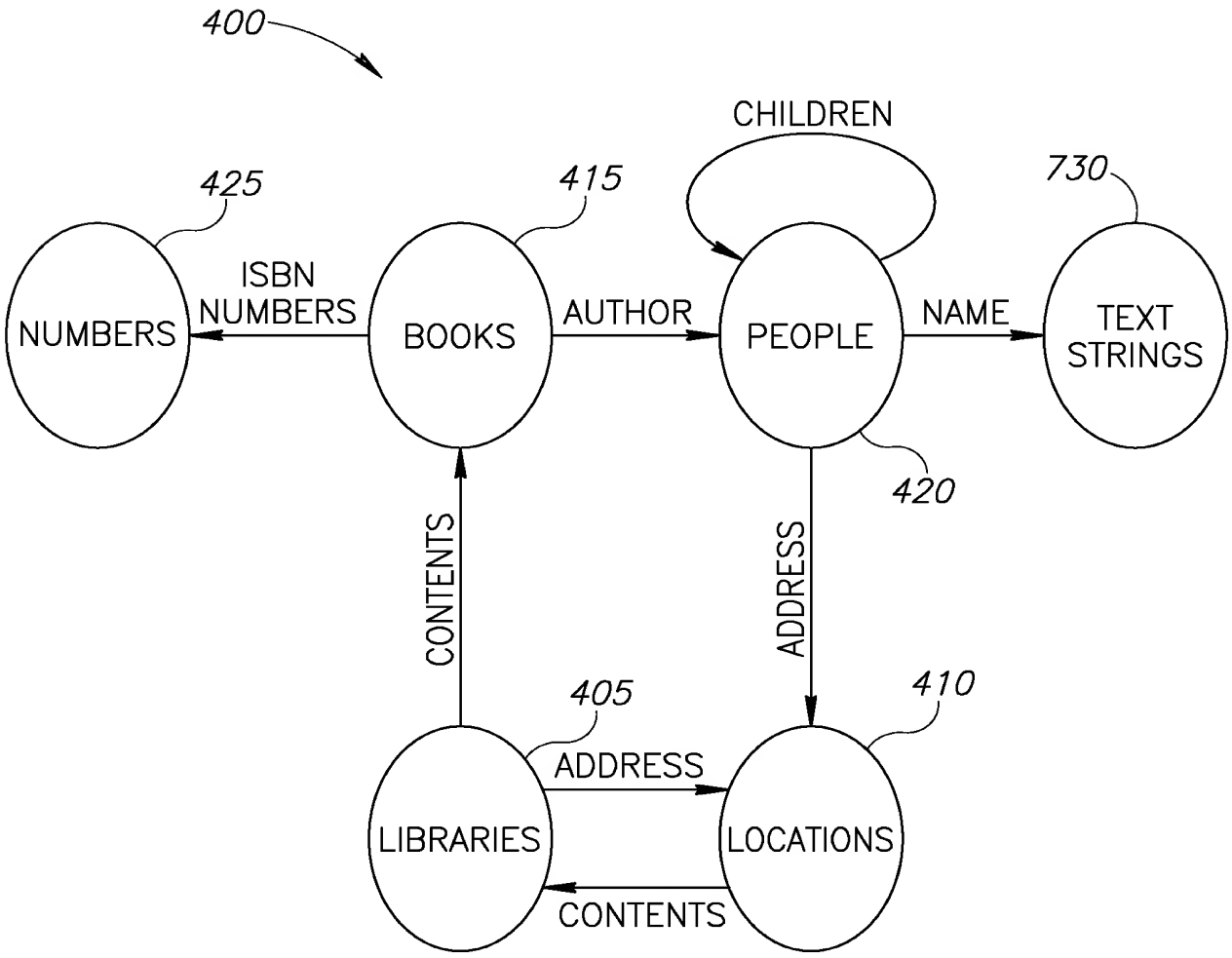

400
CHILDREN
425
415
730
ISBN
NUMBERS
AUTHOR
NAME
NUMBERS
BOOKS
PEOPLE
TEXT
STRINGS
420
CONTENTS
ADDRESS
405
410
ADDRESS
LIBRARIES
LOCATIONS
CONTENTS

FIG.4A

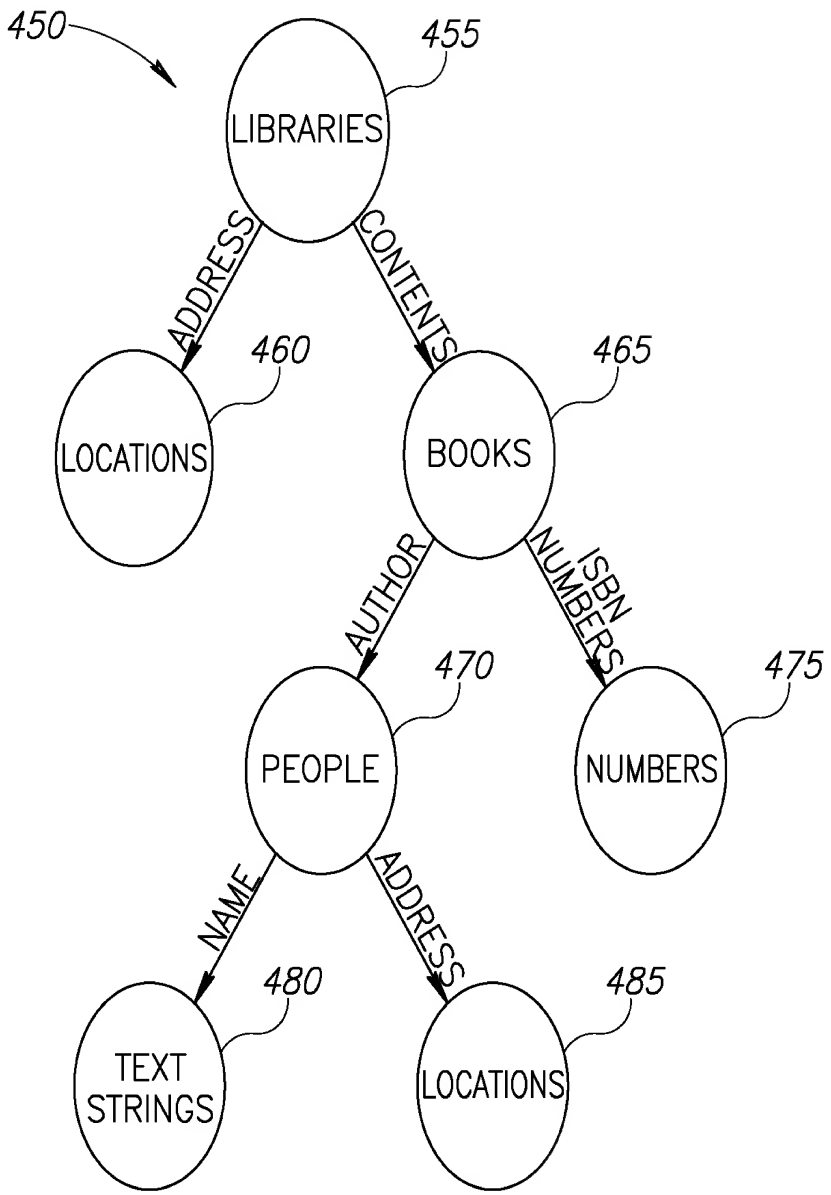

450
455
LIBRARIES
ADDRESS
CONTENTS
460
LOCATIONS
465
BOOKS
AUTHOR
ISBN NUMBERS
470
PEOPLE
475
NUMBERS
NAME
ADDRESS
480
TEXT STRINGS
485
LOCATIONS

FIG.4B

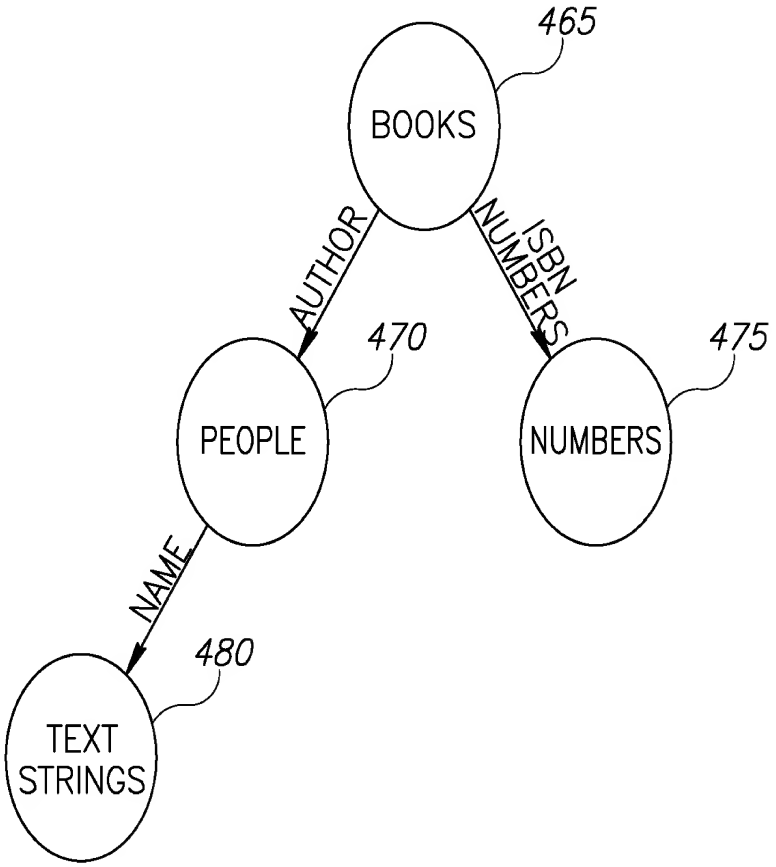

465
BOOKS
AUTHOR
ISBN NUMBERS
470
PEOPLE
475
NUMBERS
NAME
480
TEXT STRINGS

FIG.4C

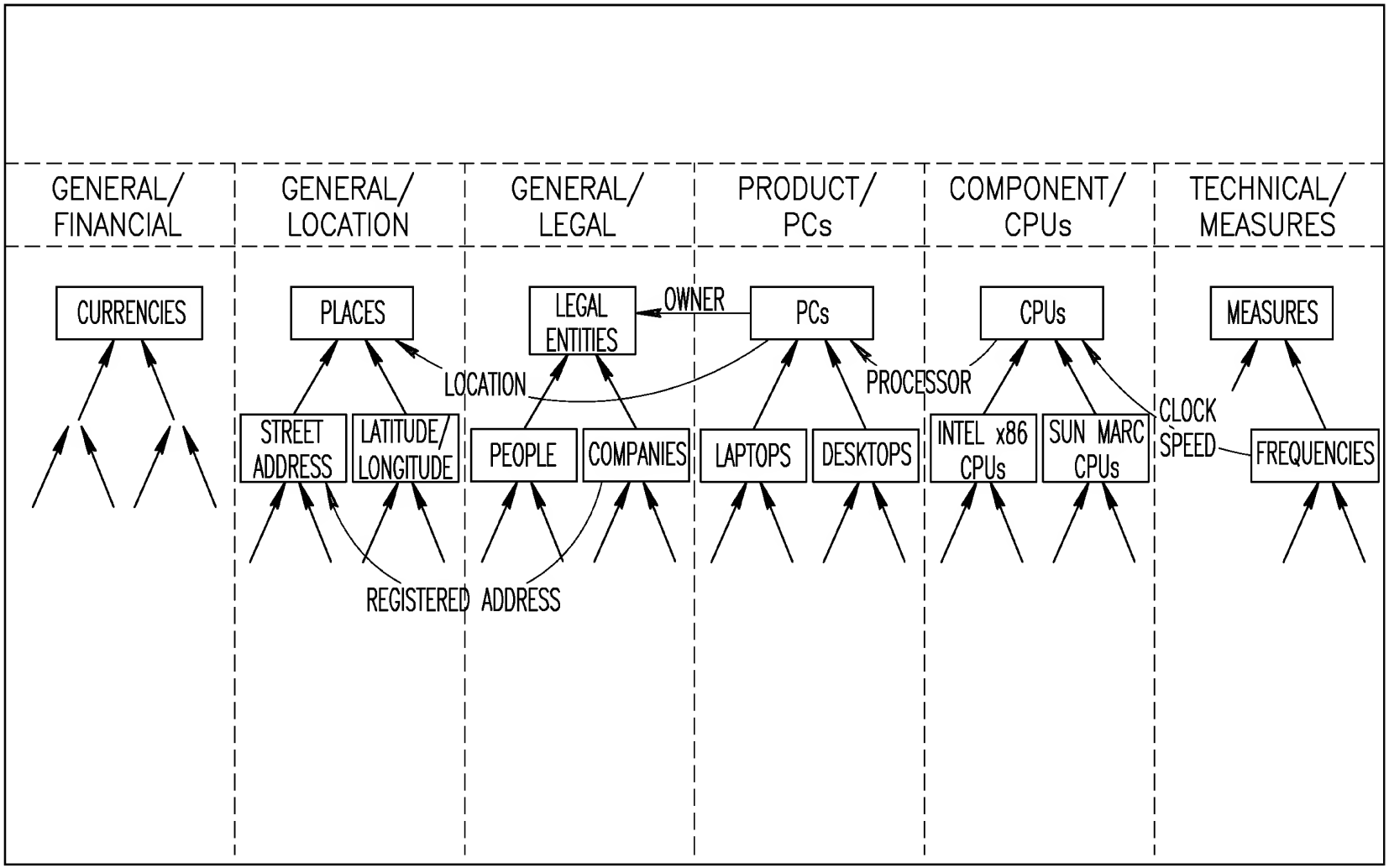

GENERAL/ FINANCIAL
GENERAL/ LOCATION
GENERAL/ LEGAL
PRODUCT/ PCs
COMPONENT/ CPUs
TECHNICAL/ MEASURES
CURRENCIES
PLACES
LEGAL ENTITIES
OWNER
PCs
CPUs
MEASURES
LOCATION
PROCESSOR
STREET ADDRESS
LATITUDE/ LONGITUDE
PEOPLE
COMPANIES
LAPTOPS
DESKTOPS
INTEL x86 CPUs
SUN MARC CPUs
CLOCK SPEED
FREQUENCIES
REGISTERED ADDRESS

FIG.5A

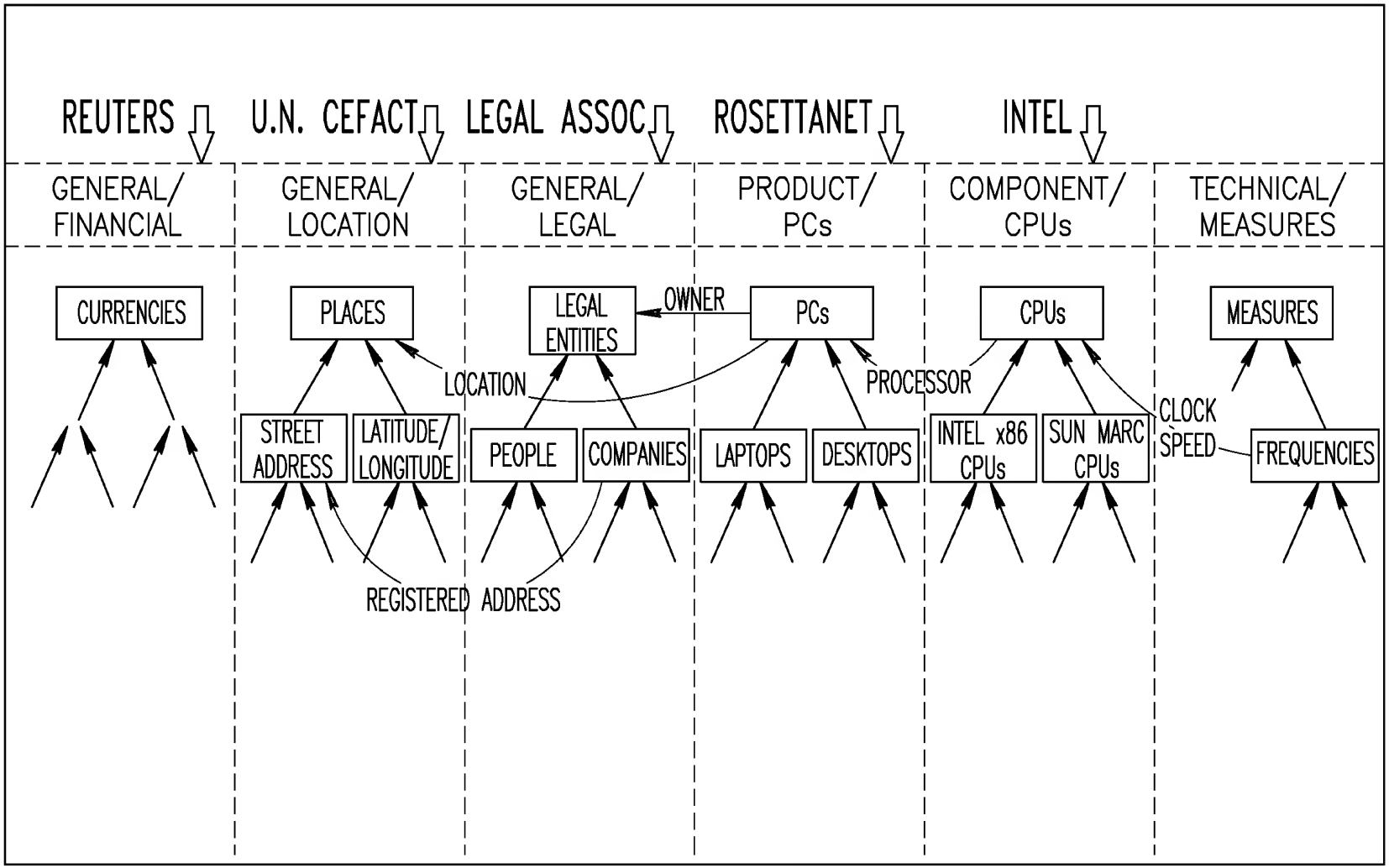

REUTERS
U.N. CEFACT
LEGAL ASSOC
ROSETTANET
INTEL
GENERAL/ FINANCIAL
GENERAL/ LOCATION
GENERAL/ LEGAL
PRODUCT/ PCs
COMPONENT/ CPUs
TECHNICAL/ MEASURES
CURRENCIES
PLACES
LEGAL ENTITIES
OWNER
PCs
CPUs
MEASURES
LOCATION
PROCESSOR
CLOCK SPEED
STREET ADDRESS
LATITUDE/ LONGITUDE
PEOPLE
COMPANIES
LAPTOPS
DESKTOPS
INTEL x86 CPUs
SUN MARC CPUs
FREQUENCIES
REGISTERED ADDRESS

FIG.5B

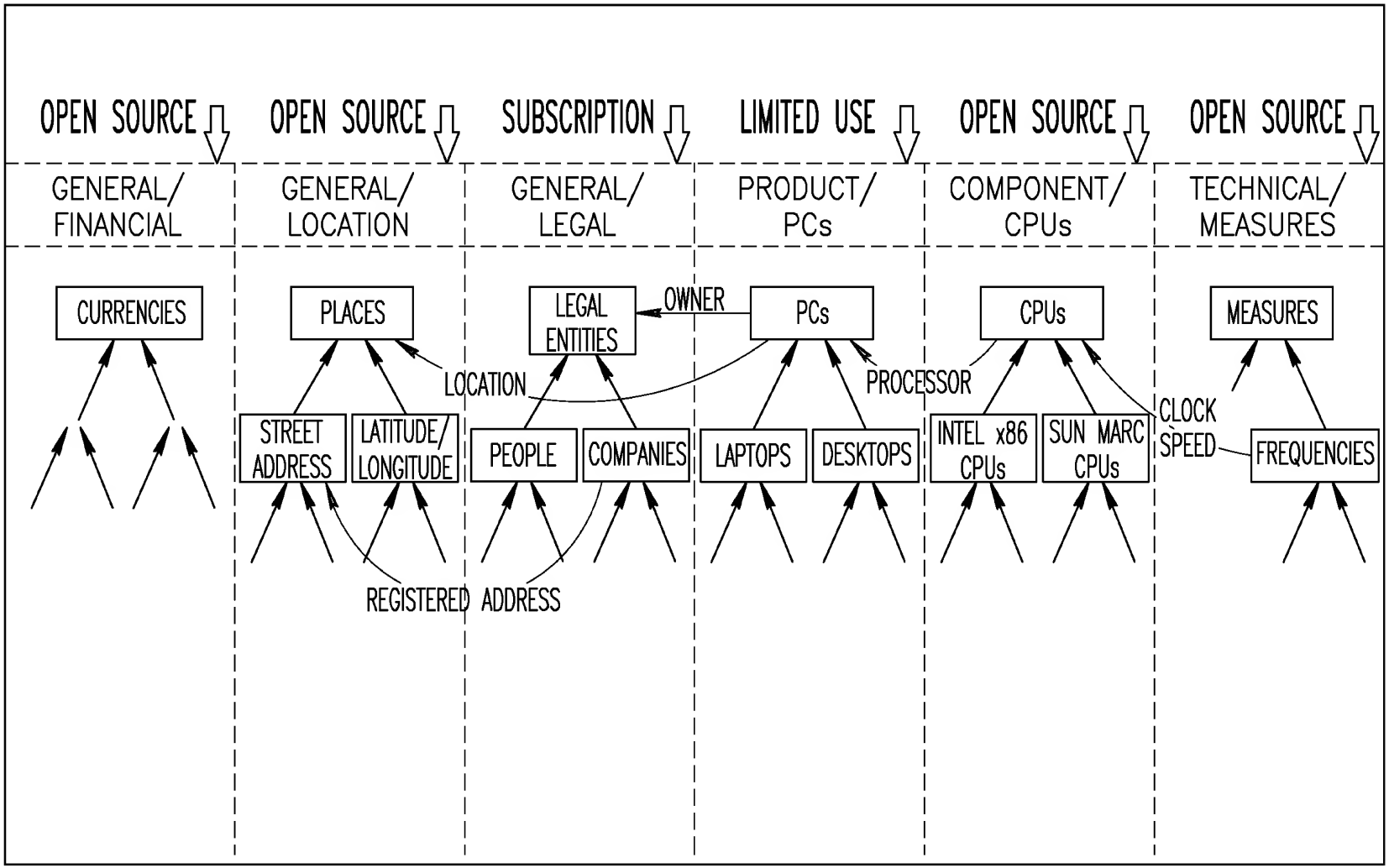

OPEN SOURCE
OPEN SOURCE
SUBSCRIPTION
LIMITED USE
OPEN SOURCE
OPEN SOURCE
GENERAL/ FINANCIAL
GENERAL/ LOCATION
GENERAL/ LEGAL
PRODUCT/ PCs
COMPONENT/ CPUs
TECHNICAL/ MEASURES
CURRENCIES
PLACES
LEGAL ENTITIES
OWNER
PCs
CPUs
MEASURES
LOCATION
PROCESSOR
CLOCK SPEED
STREET ADDRESS
LATITUDE/ LONGITUDE
PEOPLE
COMPANIES
LAPTOPS
DESKTOPS
INTEL x86 CPUs
SUN MARC CPUs
FREQUENCIES
REGISTERED ADDRESS

FIG.5C

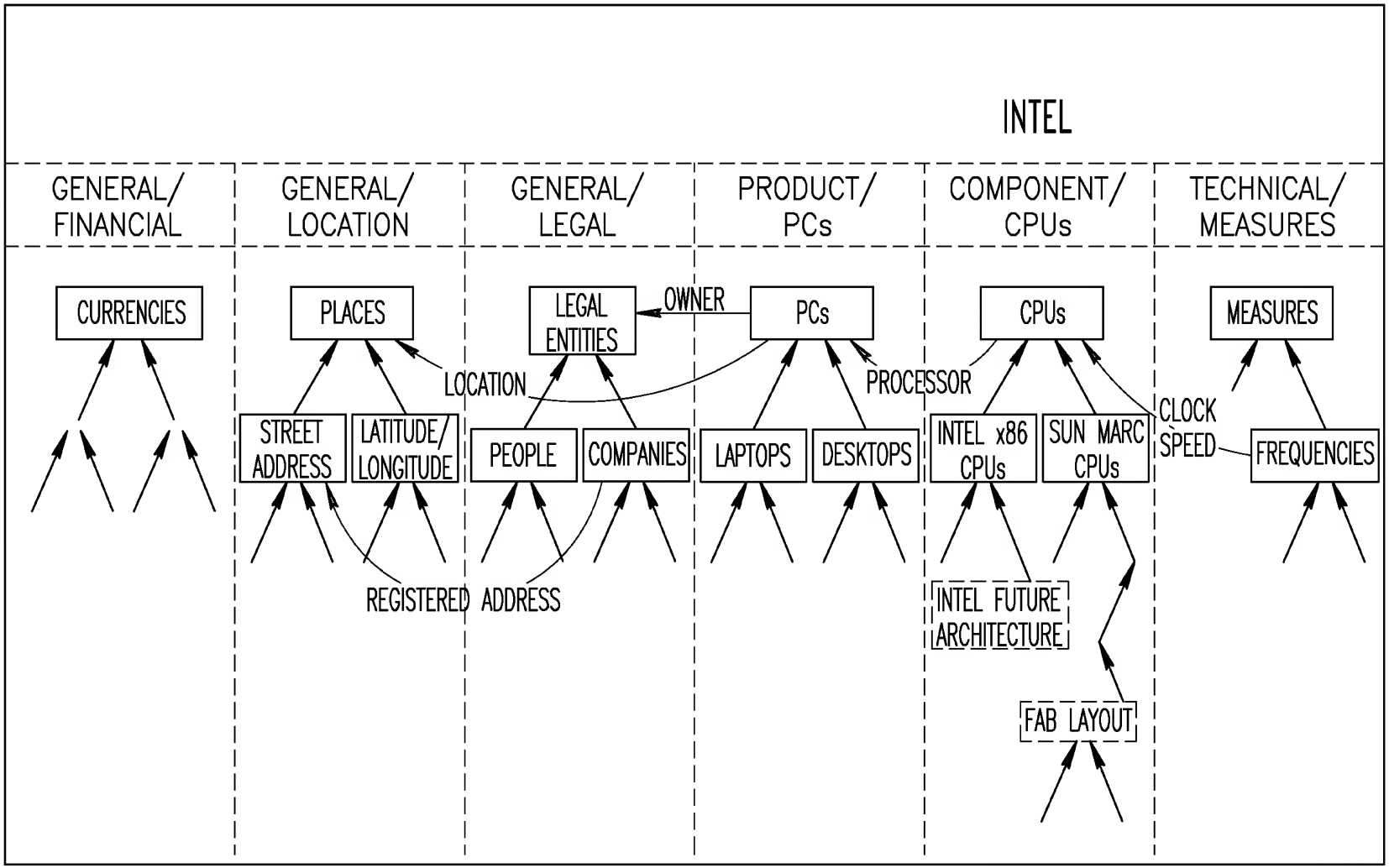

INTEL
GENERAL/ FINANCIAL
GENERAL/ LOCATION
GENERAL/ LEGAL
PRODUCT/ PCs
COMPONENT/ CPUs
TECHNICAL/ MEASURES
CURRENCIES
PLACES
LEGAL ENTITIES
OWNER
PCs
CPUs
MEASURES
LOCATION
PROCESSOR
CLOCK SPEED
STREET ADDRESS
LATITUDE/ LONGITUDE
PEOPLE
COMPANIES
LAPTOPS
DESKTOPS
INTEL x86 CPUs
SUN MARC CPUs
FREQUENCIES
REGISTERED ADDRESS
INTEL FUTURE ARCHITECTURE
FAB LAYOUT

FIG.5D

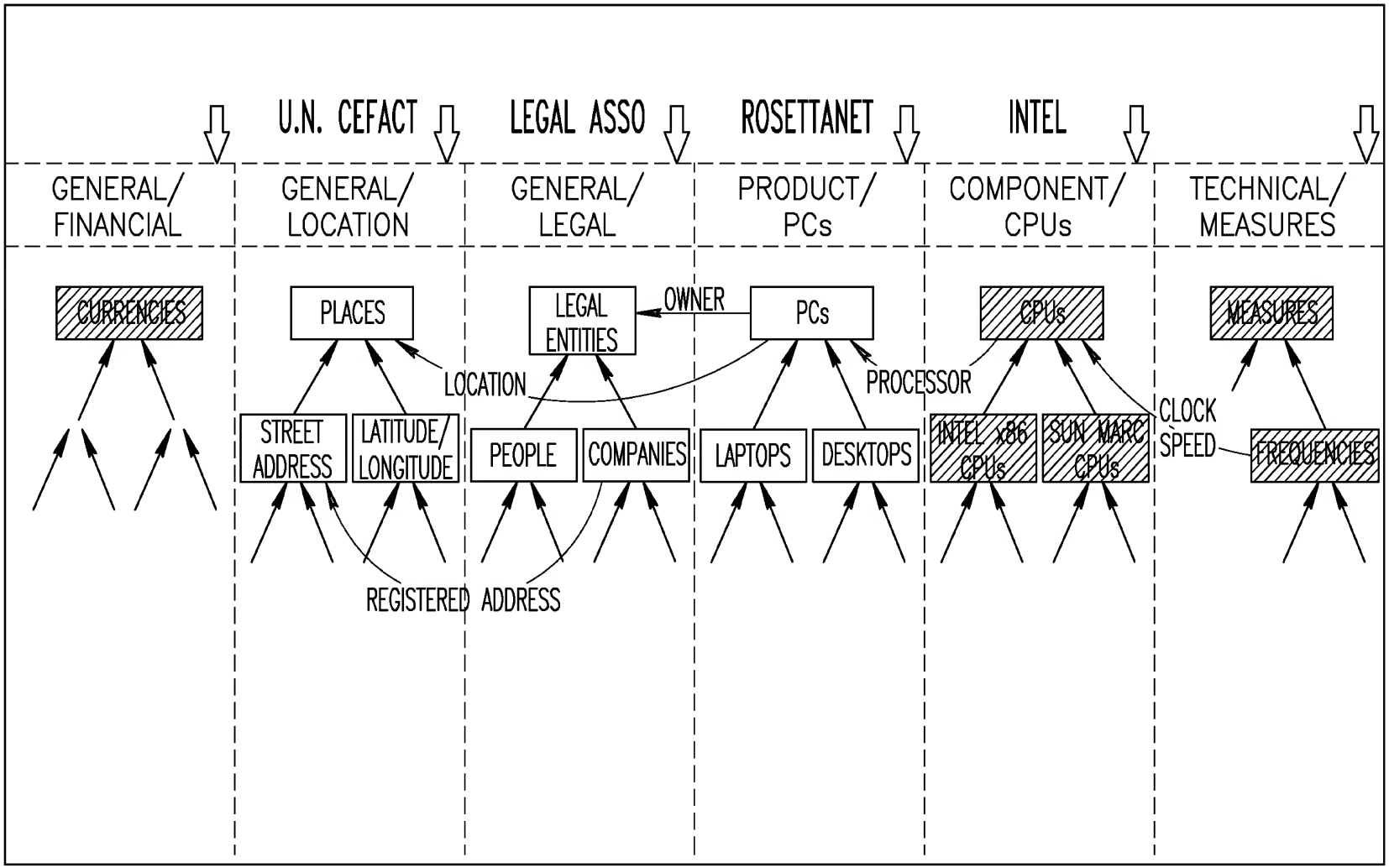

U.N. CEFACT
LEGAL ASSO
ROSETTANET
INTEL
GENERAL/ FINANCIAL
GENERAL/ LOCATION
GENERAL/ LEGAL
PRODUCT/ PCs
COMPONENT/ CPUs
TECHNICAL/ MEASURES
CURRENCIES
PLACES
LEGAL ENTITIES
OWNER
PCs
CPUs
MEASURES
LOCATION
PROCESSOR
CLOCK SPEED
STREET ADDRESS
LATITUDE/ LONGITUDE
PEOPLE
COMPANIES
LAPTOPS
DESKTOPS
INTEL x86 CPUs
SUN MARC CPUs
FREQUENCIES
REGISTERED ADDRESS

FIG.5E

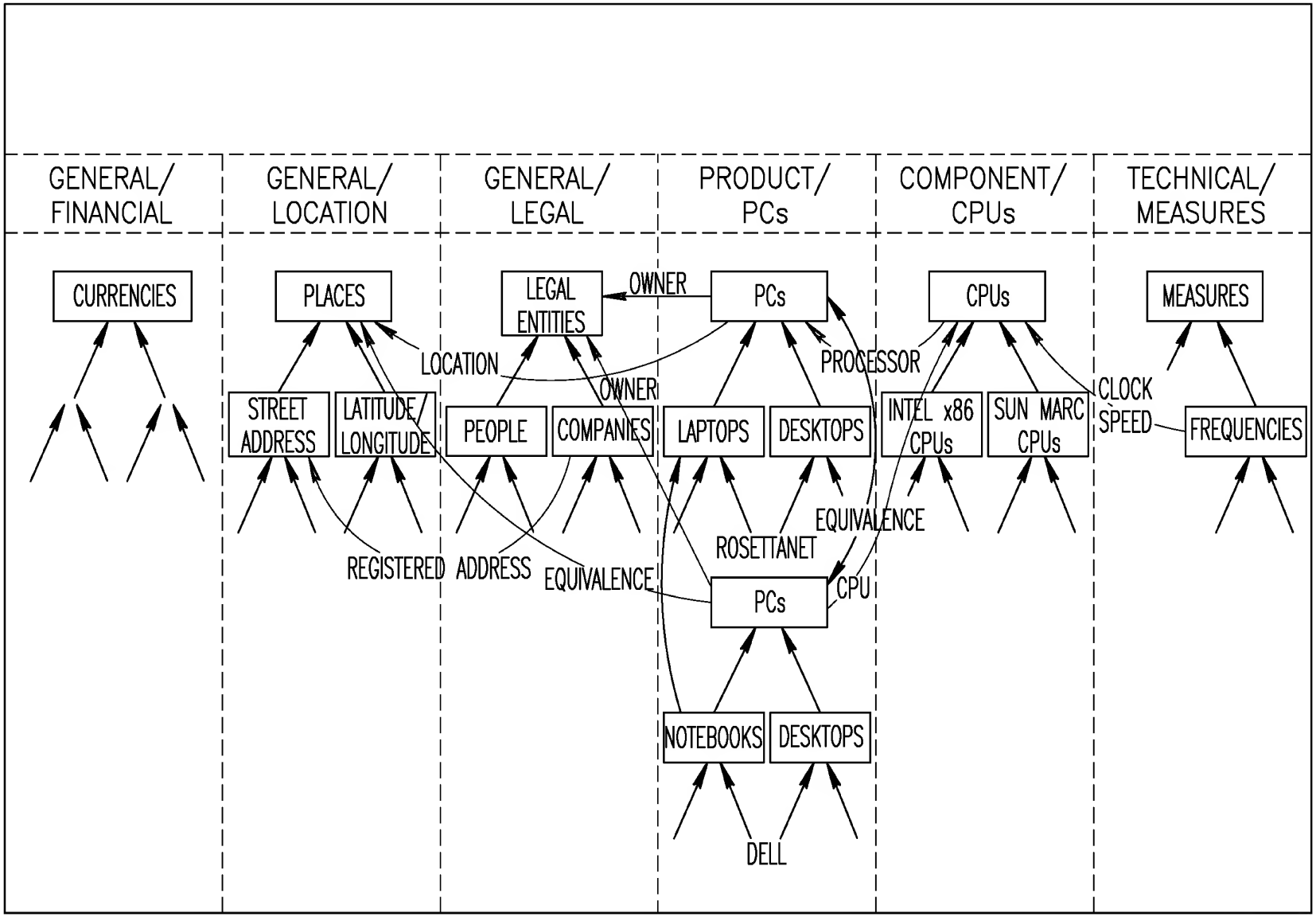

GENERAL/ FINANCIAL
GENERAL/ LOCATION
GENERAL/ LEGAL
PRODUCT/ PCs
COMPONENT/ CPUs
TECHNICAL/ MEASURES
CURRENCIES
PLACES
LEGAL ENTITIES
OWNER
PCs
CPUs
MEASURES
LOCATION
PROCESSOR
CLOCK SPEED
STREET ADDRESS
LATITUDE/ LONGITUDE
OWNER
PEOPLE
COMPANIES
LAPTOPS
DESKTOPS
INTEL x86 CPUs
SUN MARC CPUs
FREQUENCIES
EQUIVALENCE
ROSETTANET
REGISTERED ADDRESS
EQUIVALENCE
CPU
PCs
NOTEBOOKS
DESKTOPS
DELL

FIG.5F

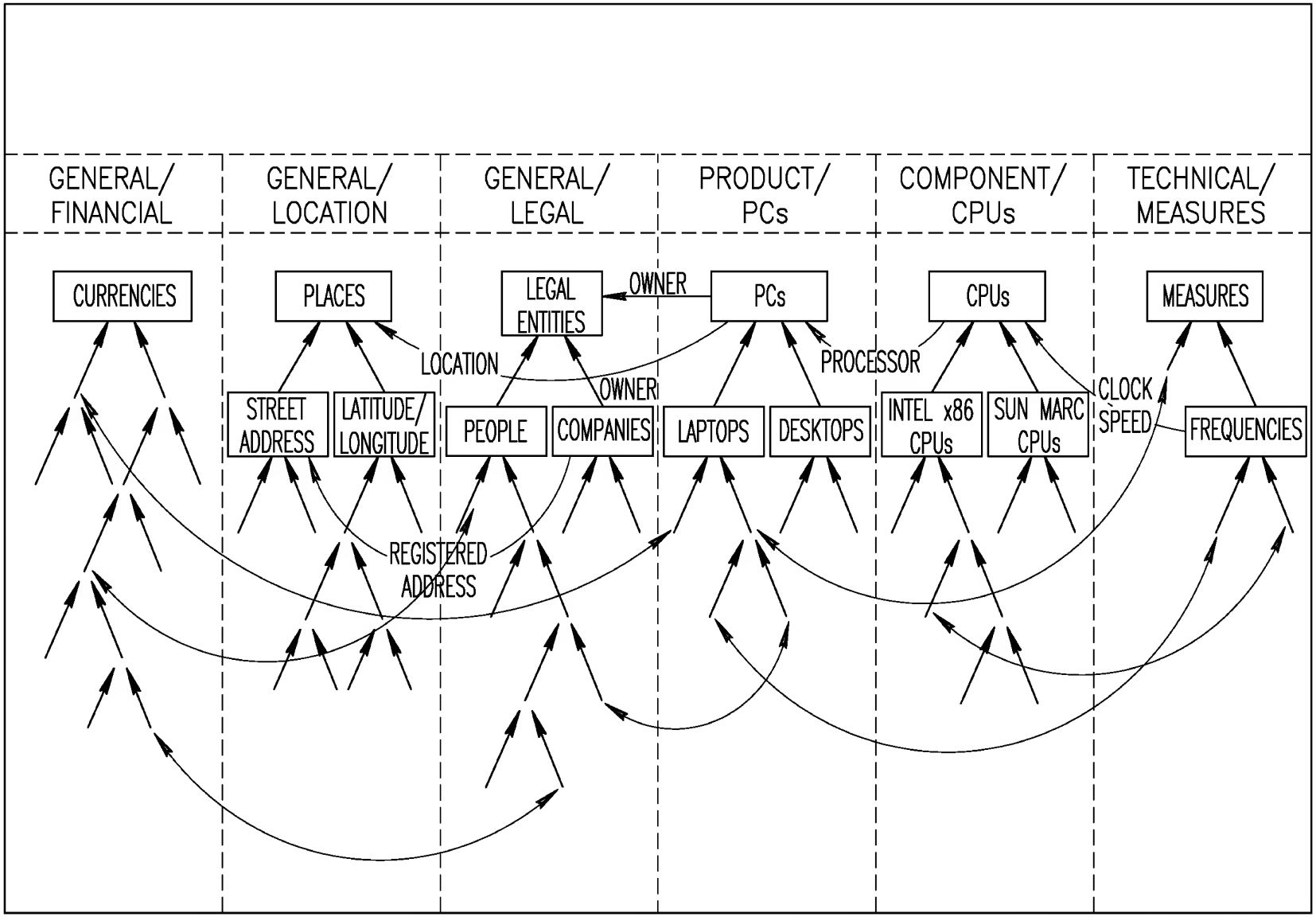

GENERAL/
FINANCIAL
GENERAL/
LOCATION
GENERAL/
LEGAL
PRODUCT/
PCs
COMPONENT/
CPUs
TECHNICAL/
MEASURES
CURRENCIES
PLACES
LEGAL
ENTITIES
OWNER
PCs
CPUs
MEASURES
LOCATION
PROCESSOR
OWNER
CLOCK
SPEED
STREET
ADDRESS
LATITUDE/
LONGITUDE
PEOPLE
COMPANIES
LAPTOPS
DESKTOPS
INTEL x86
CPUs
SUN MARC
CPUs
FREQUENCIES
REGISTERED
ADDRESS

FIG.5G

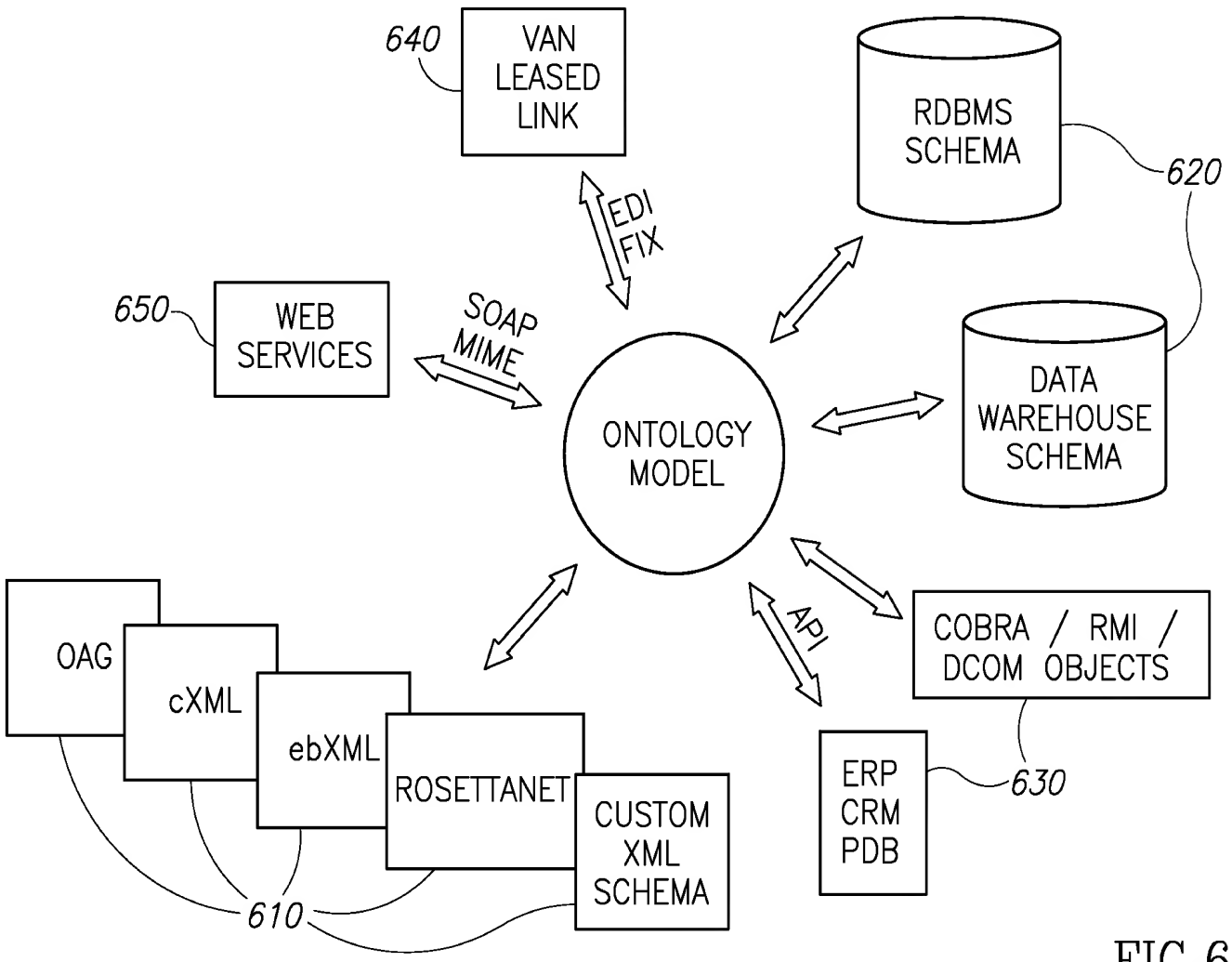

640
VAN
LEASED
LINK
EDI
FIX
RDBMS
SCHEMA
620
650
WEB
SERVICES
SOAP
MIME
ONTOLOGY
MODEL
DATA
WAREHOUSE
SCHEMA
OAG
cXML
ebXML
ROSETTANET
CUSTOM
XML
SCHEMA
610
API
COBRA / RMI /
DCOM OBJECTS
ERP
CRM
PDB
630

FIG.6

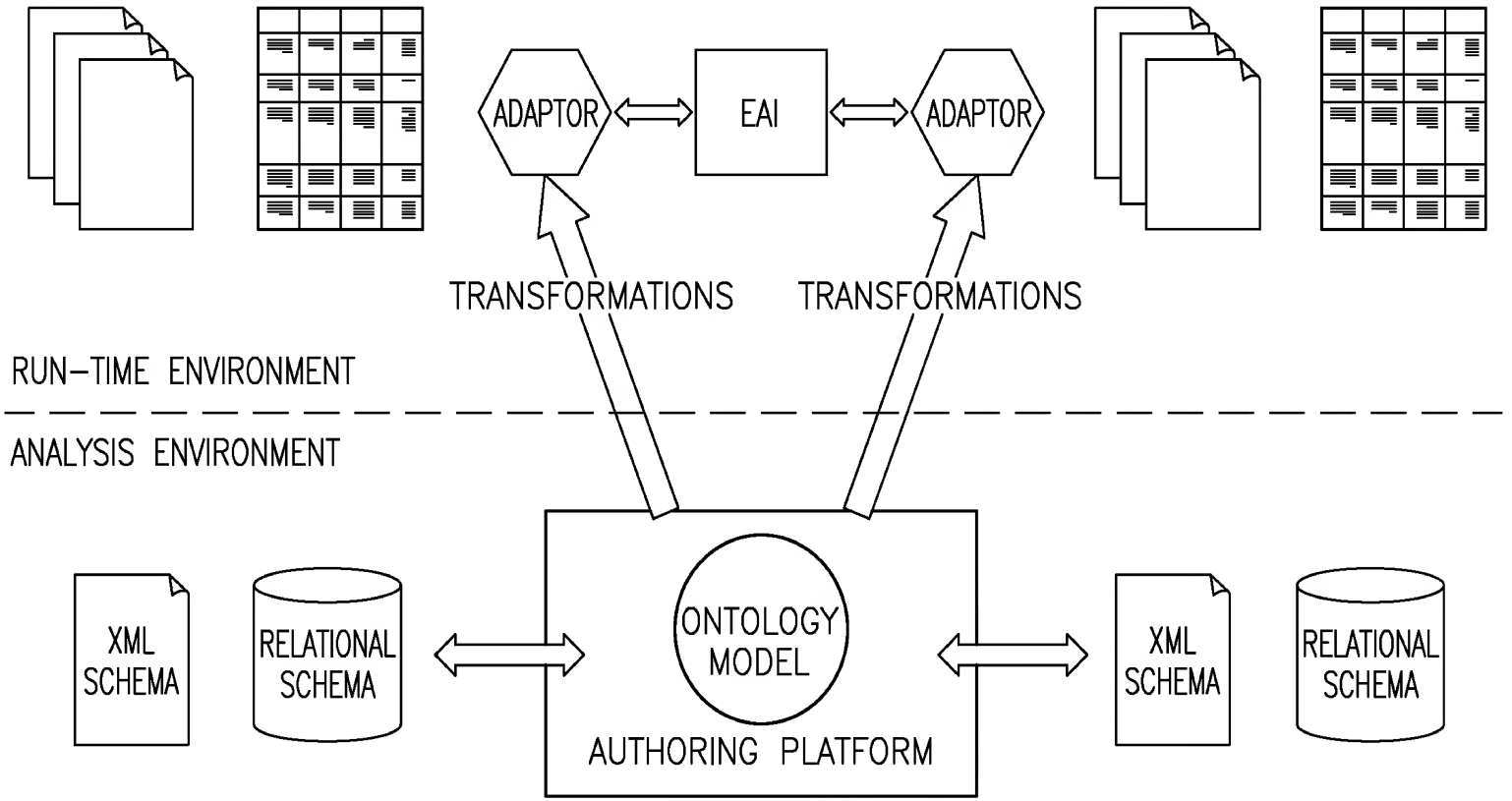

ADAPTOR
EAI
ADAPTOR
TRANSFORMATIONS
TRANSFORMATIONS
RUN–TIME ENVIRONMENT
ANALYSIS ENVIRONMENT
XML SCHEMA
RELATIONAL SCHEMA
ONTOLOGY MODEL
AUTHORING PLATFORM
XML SCHEMA
RELATIONAL SCHEMA

FIG.7

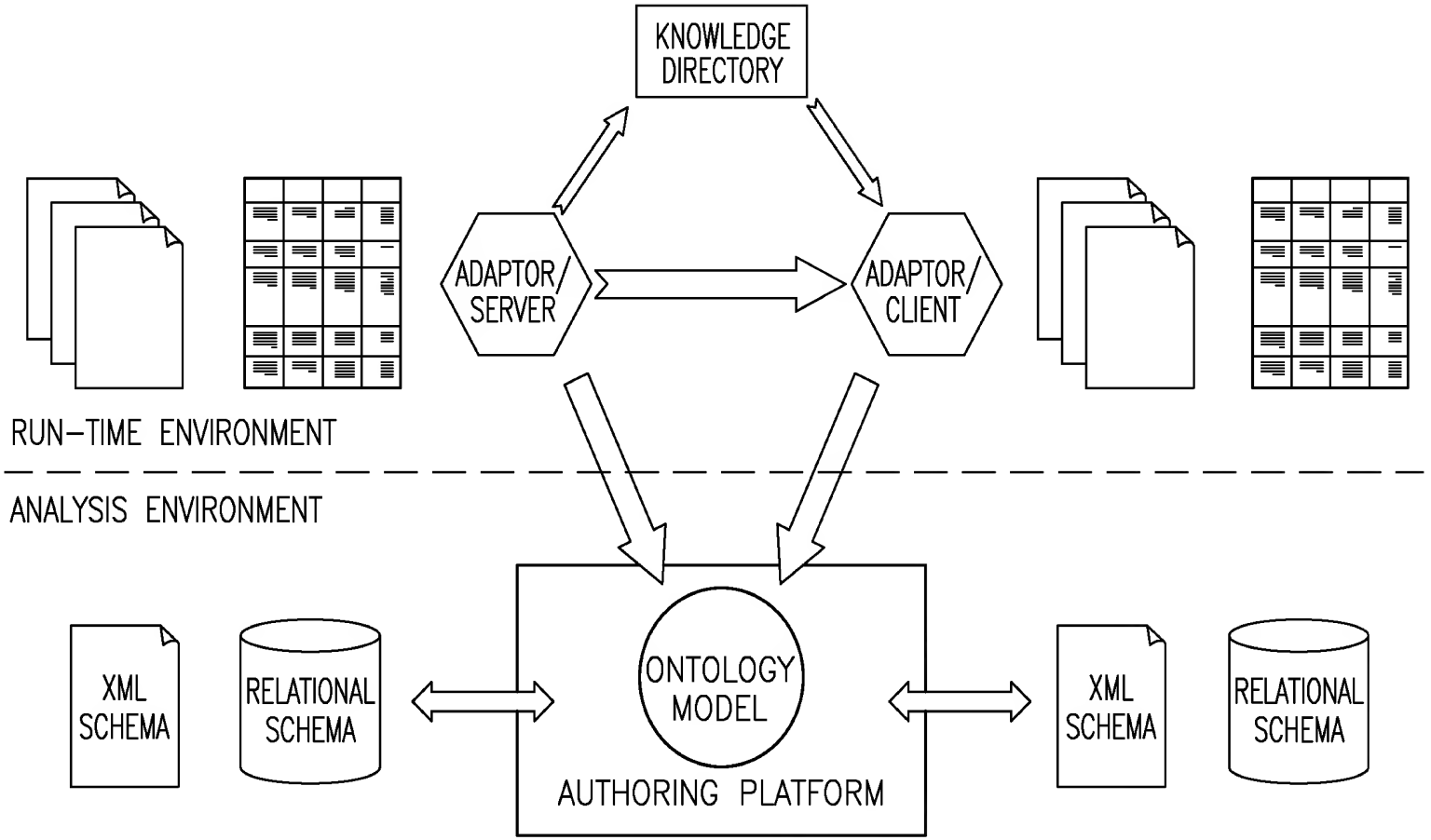

KNOWLEDGE DIRECTORY
ADAPTOR/ SERVER
ADAPTOR/ CLIENT
RUN-TIME ENVIRONMENT
ANALYSIS ENVIRONMENT
XML SCHEMA
RELATIONAL SCHEMA
ONTOLOGY MODEL
AUTHORING PLATFORM
XML SCHEMA
RELATIONAL SCHEMA

FIG.8

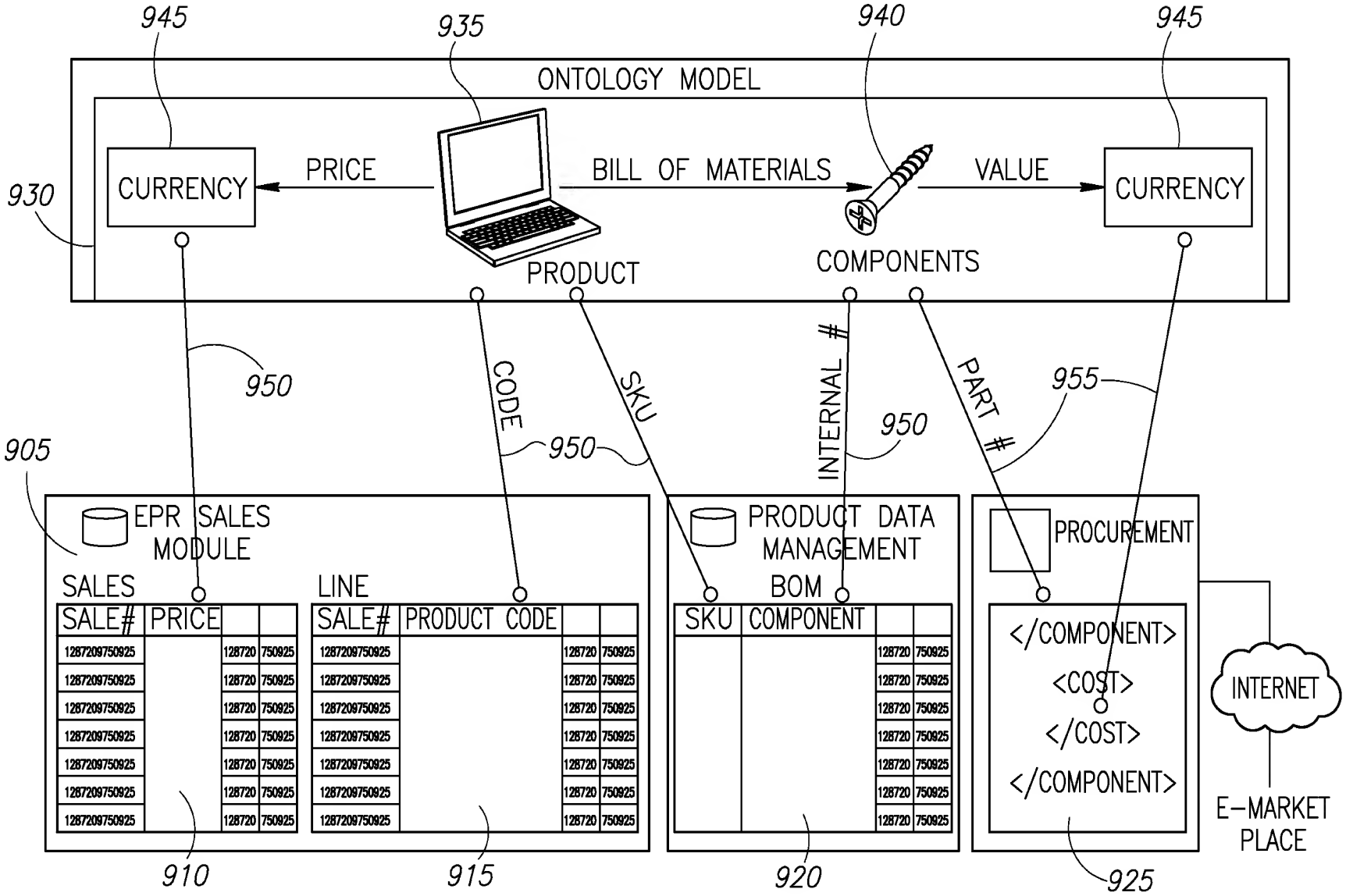

945
935
940
945
ONTOLOGY MODEL
CURRENCY
PRICE
BILL OF MATERIALS
VALUE
CURRENCY
930
PRODUCT
COMPONENTS
950
CODE
SKU
INTERNAL #
950
PART #
955
950
905
EPR SALES MODULE
SALES
SALE#
PRICE
LINE
SALE#
PRODUCT CODE
PRODUCT DATA MANAGEMENT
BOM
SKU
COMPONENT
PROCUREMENT
</COMPONENT>
<COST>
</COST>
</COMPONENT>
INTERNET
E-MARKET PLACE
910
915
920
925

FIG.9

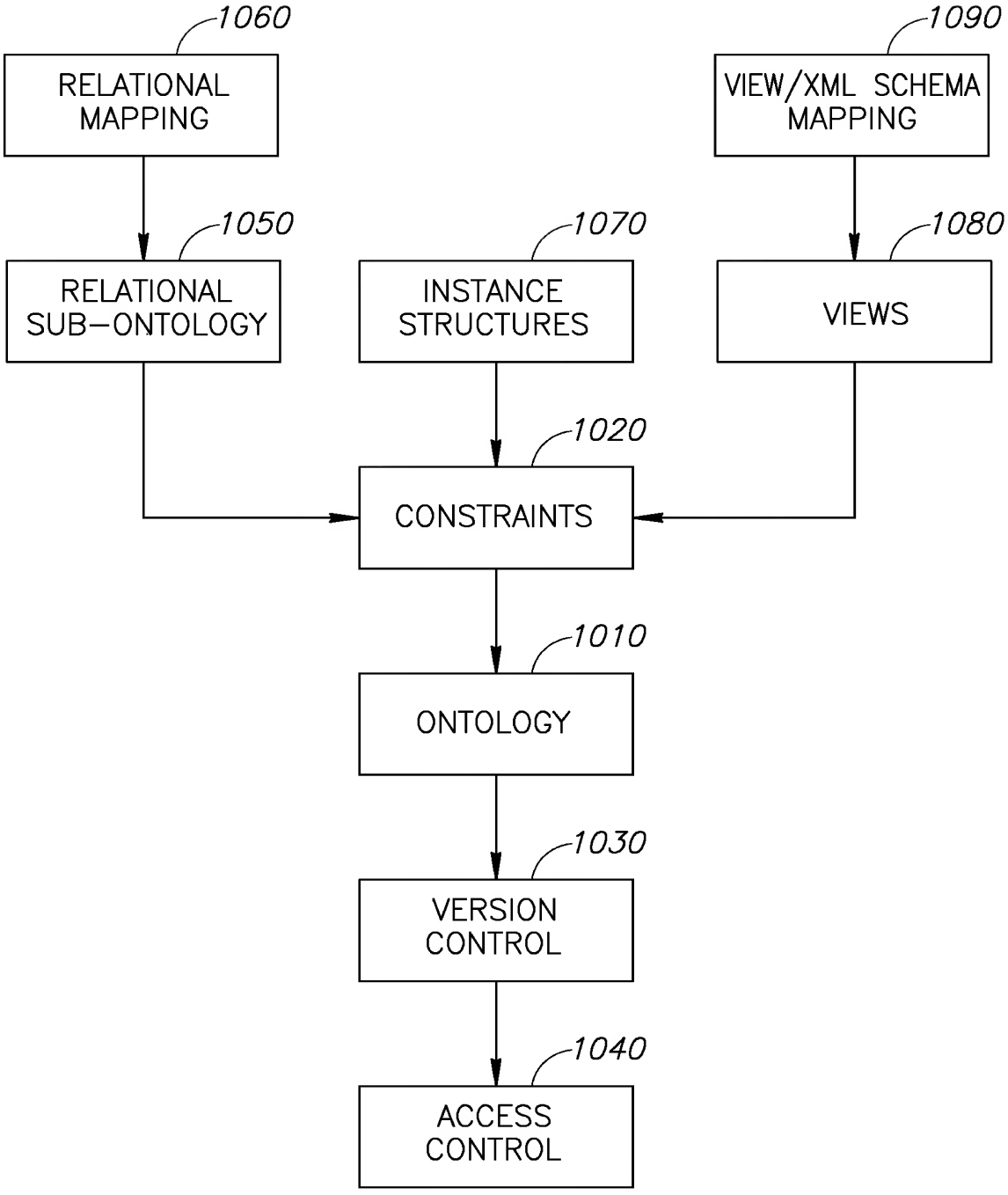

1060
RELATIONAL MAPPING
1090
VIEW/XML SCHEMA MAPPING
1050
RELATIONAL SUB–ONTOLOGY
1070
INSTANCE STRUCTURES
1080
VIEWS
1020
CONSTRAINTS
1010
ONTOLOGY
1030
VERSION CONTROL
1040
ACCESS CONTROL

FIG.10

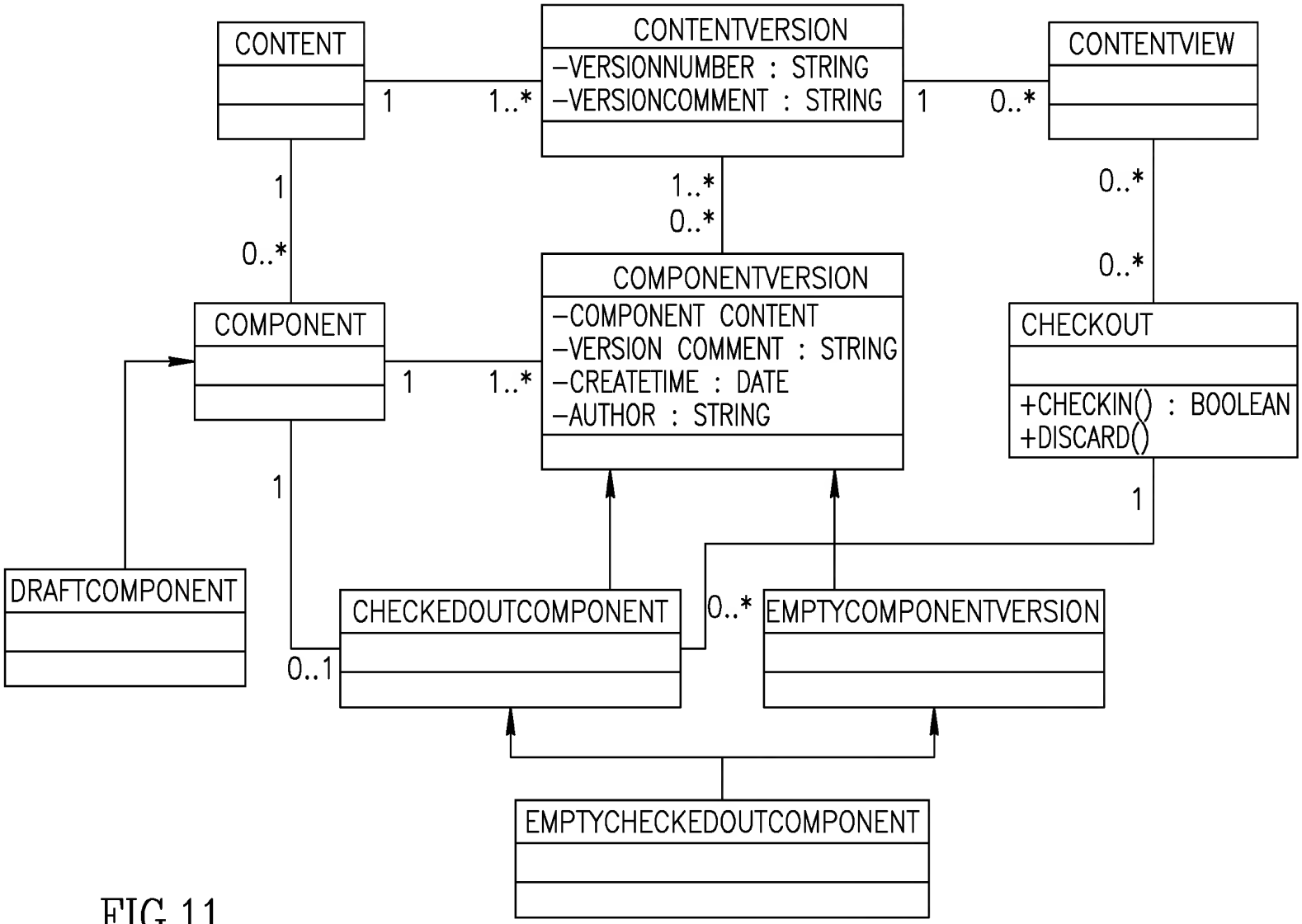

CONTENT
CONTENTVERSION
–VERSIONNUMBER : STRING
–VERSIONCOMMENT : STRING
CONTENTVIEW
1
1..*
1
0..*
1
0..*
1..*
0..*
0..*
COMPONENT
COMPONENTVERSION
–COMPONENT CONTENT
–VERSION COMMENT : STRING
–CREATETIME : DATE
–AUTHOR : STRING
CHECKOUT
+CHECKIN() : BOOLEAN
+DISCARD()
1
1..*
1
1
DRAFTCOMPONENT
CHECKEDOUTCOMPONENT
0..*
EMPTYCOMPONENTVERSION
0..1
EMPTYCHECKEDOUTCOMPONENT

FIG.11

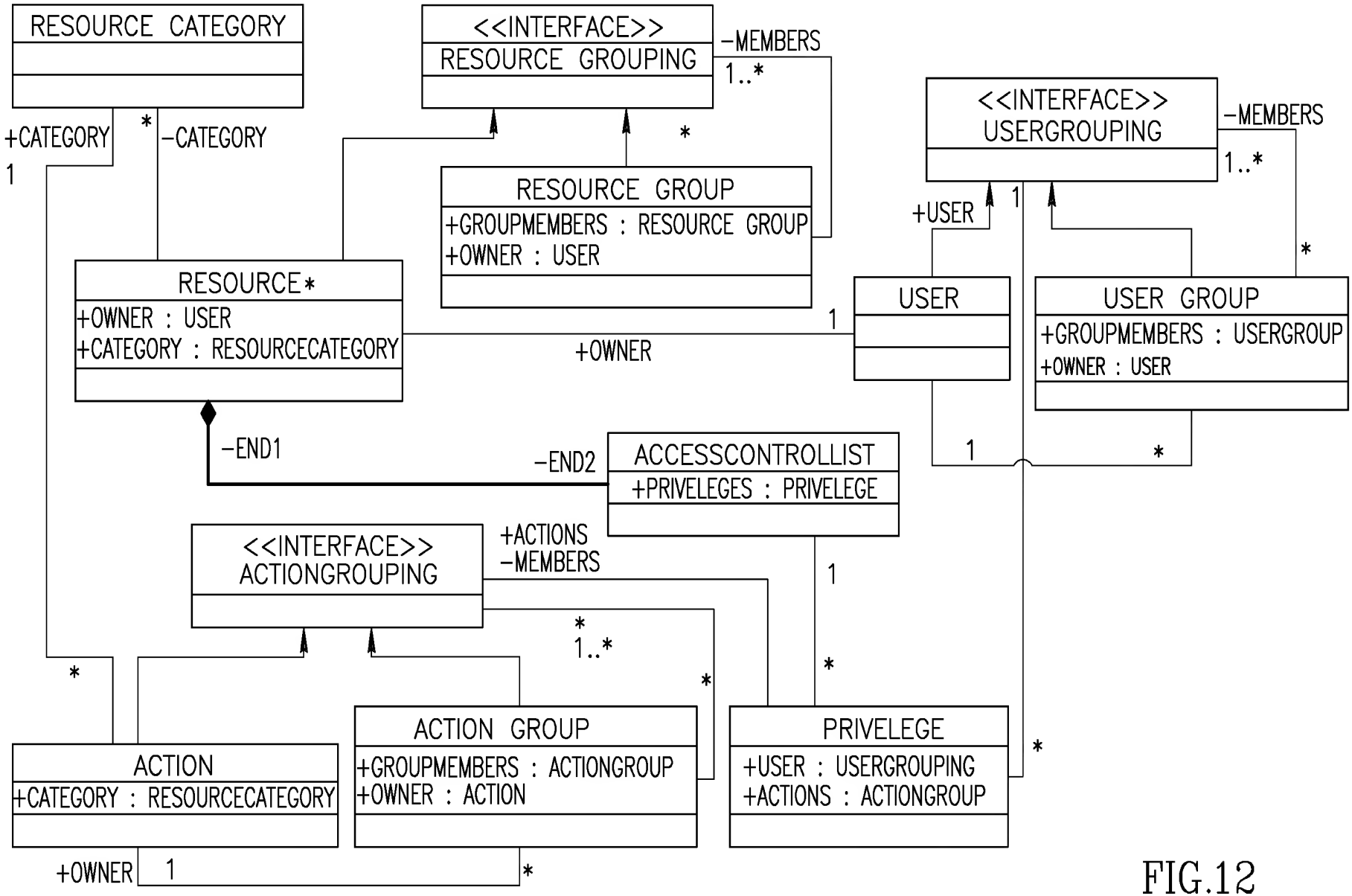
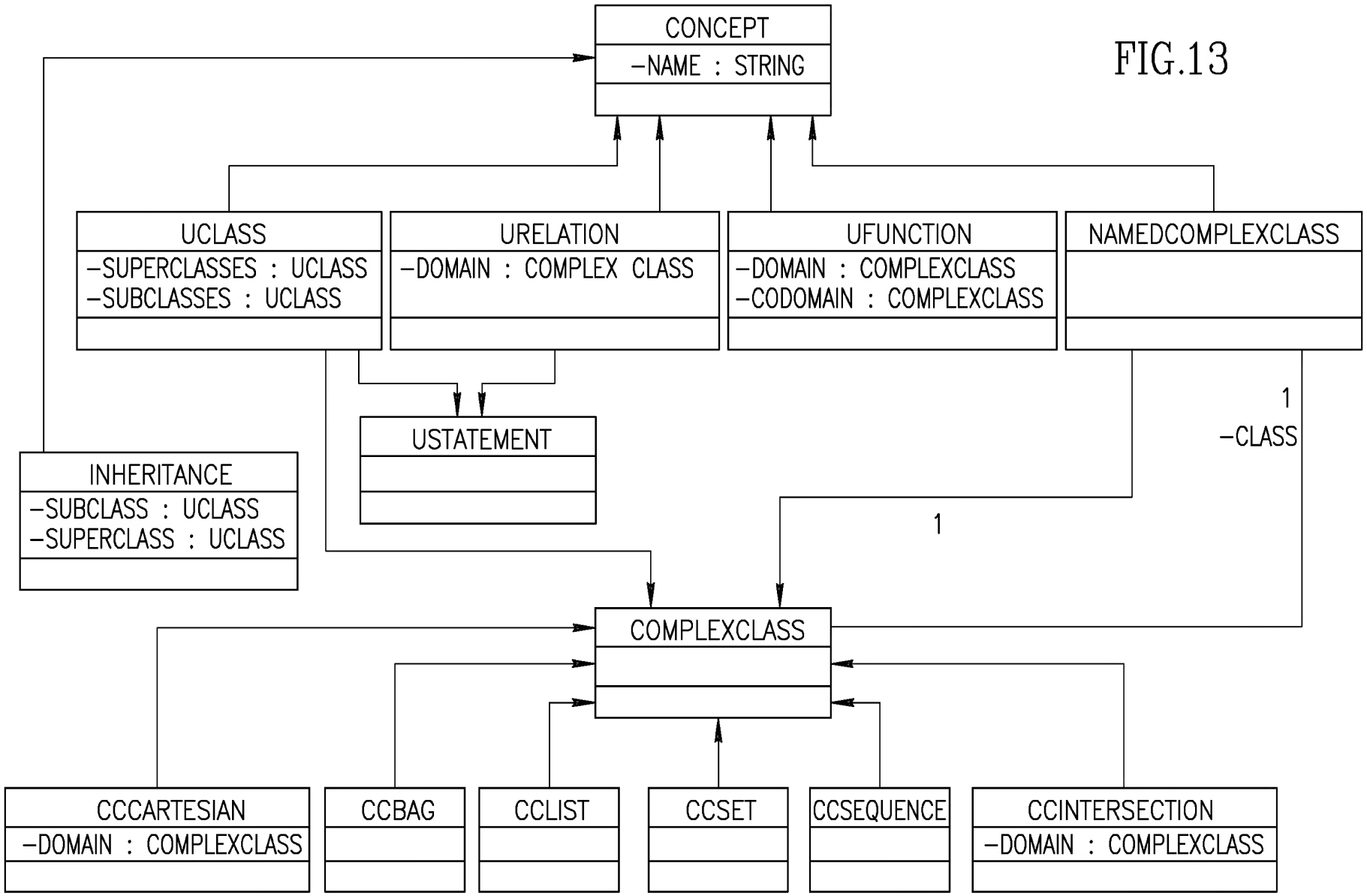

RESOURCE CATEGORY
<<INTERFACE>>
RESOURCE GROUPING
-MEMBERS
1..*
+CATEGORY
1
*
-CATEGORY
*
RESOURCE GROUP
+GROUPMEMBERS : RESOURCE GROUP
+OWNER : USER
<<INTERFACE>>
USERGROUPING
-MEMBERS
1..*
+USER
1
*
RESOURCE*
+OWNER : USER
+CATEGORY : RESOURCECATEGORY
1
+OWNER
USER
USER GROUP
+GROUPMEMBERS : USERGROUP
+OWNER : USER
-END1
-END2
ACCESSCONTROLLIST
+PRIVELEGES : PRIVELEGE
1
*
<<INTERFACE>>
ACTIONGROUPING
+ACTIONS
-MEMBERS
1
*
1..*
*
*
ACTION GROUP
+GROUPMEMBERS : ACTIONGROUP
+OWNER : ACTION
PRIVELEGE
+USER : USERGROUPING
+ACTIONS : ACTIONGROUP
*
ACTION
+CATEGORY : RESOURCECATEGORY
+OWNER
1
*

FIG.12

FIG.13


CONCEPT
-NAME : STRING
UCLASS
-SUPERCLASSES : UCLASS
-SUBCLASSES : UCLASS
URELATION
-DOMAIN : COMPLEX CLASS
UFUNCTION
-DOMAIN : COMPLEXCLASS
-CODOMAIN : COMPLEXCLASS
NAMEDCOMPLEXCLASS
USTATEMENT
INHERITANCE
-SUBCLASS : UCLASS
-SUPERCLASS : UCLASS
1
-CLASS
1
COMPLEXCLASS
CCCARTESIAN
-DOMAIN : COMPLEXCLASS
CCBAG
CCLIST
CCSET
CCSEQUENCE
CCINTERSECTION
-DOMAIN : COMPLEXCLASS

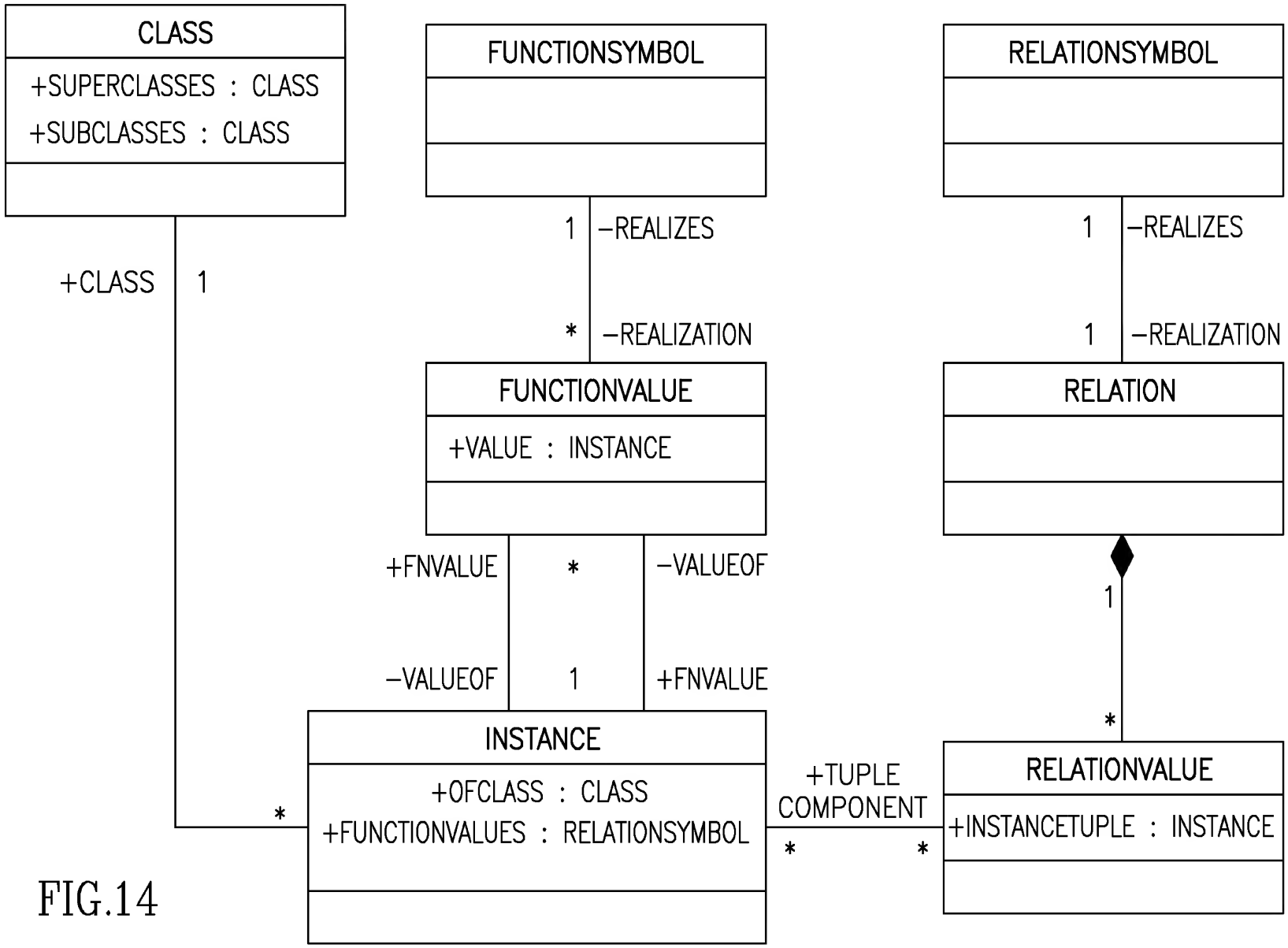

CLASS
+SUPERCLASSES : CLASS
+SUBCLASSES : CLASS
FUNCTIONSYMBOL
RELATIONSYMBOL
1
–REALIZES
1
–REALIZES
+CLASS
1
*
–REALIZATION
1
–REALIZATION
FUNCTIONVALUE
+VALUE : INSTANCE
RELATION
+FNVALUE
*
–VALUEOF
1
–VALUEOF
1
+FNVALUE
*
INSTANCE
+OFCLASS : CLASS
+FUNCTIONVALUES : RELATIONSYMBOL
*
+TUPLE
COMPONENT
RELATIONVALUE
+INSTANCETUPLE : INSTANCE
*
*

FIG.14

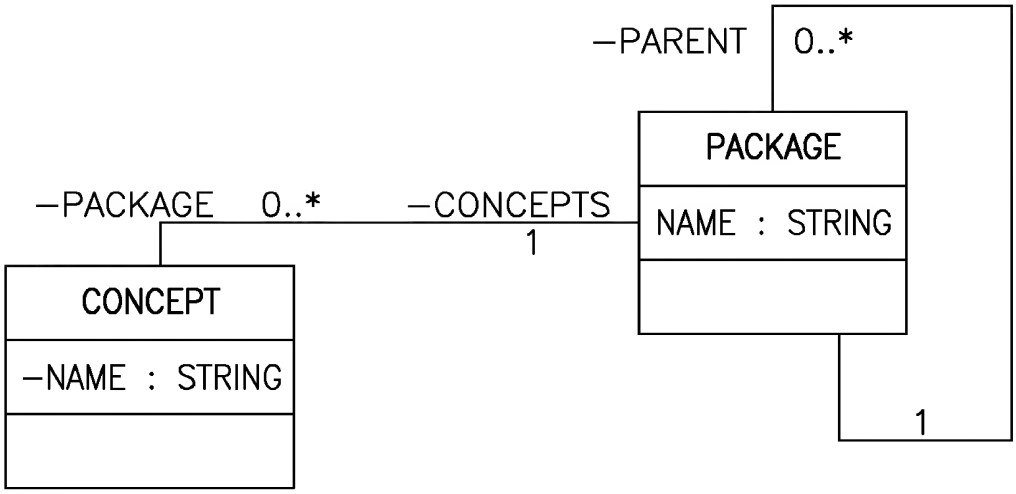

−PARENT
0..*
PACKAGE
NAME : STRING
−PACKAGE
0..*
−CONCEPTS
1
CONCEPT
−NAME : STRING
1

FIG.15

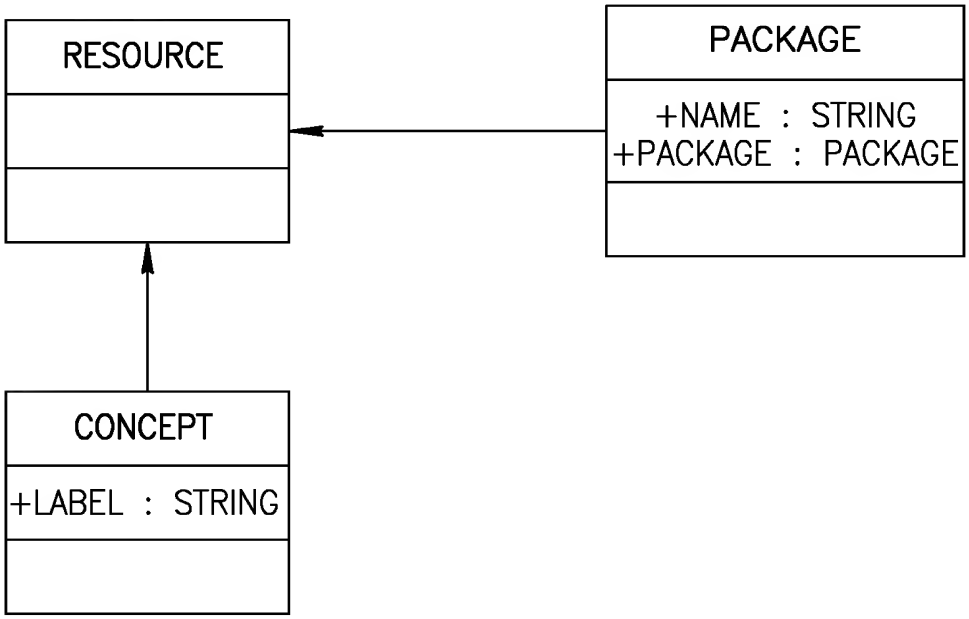

RESOURCE
PACKAGE
+NAME : STRING
+PACKAGE : PACKAGE
CONCEPT
+LABEL : STRING

FIG.16

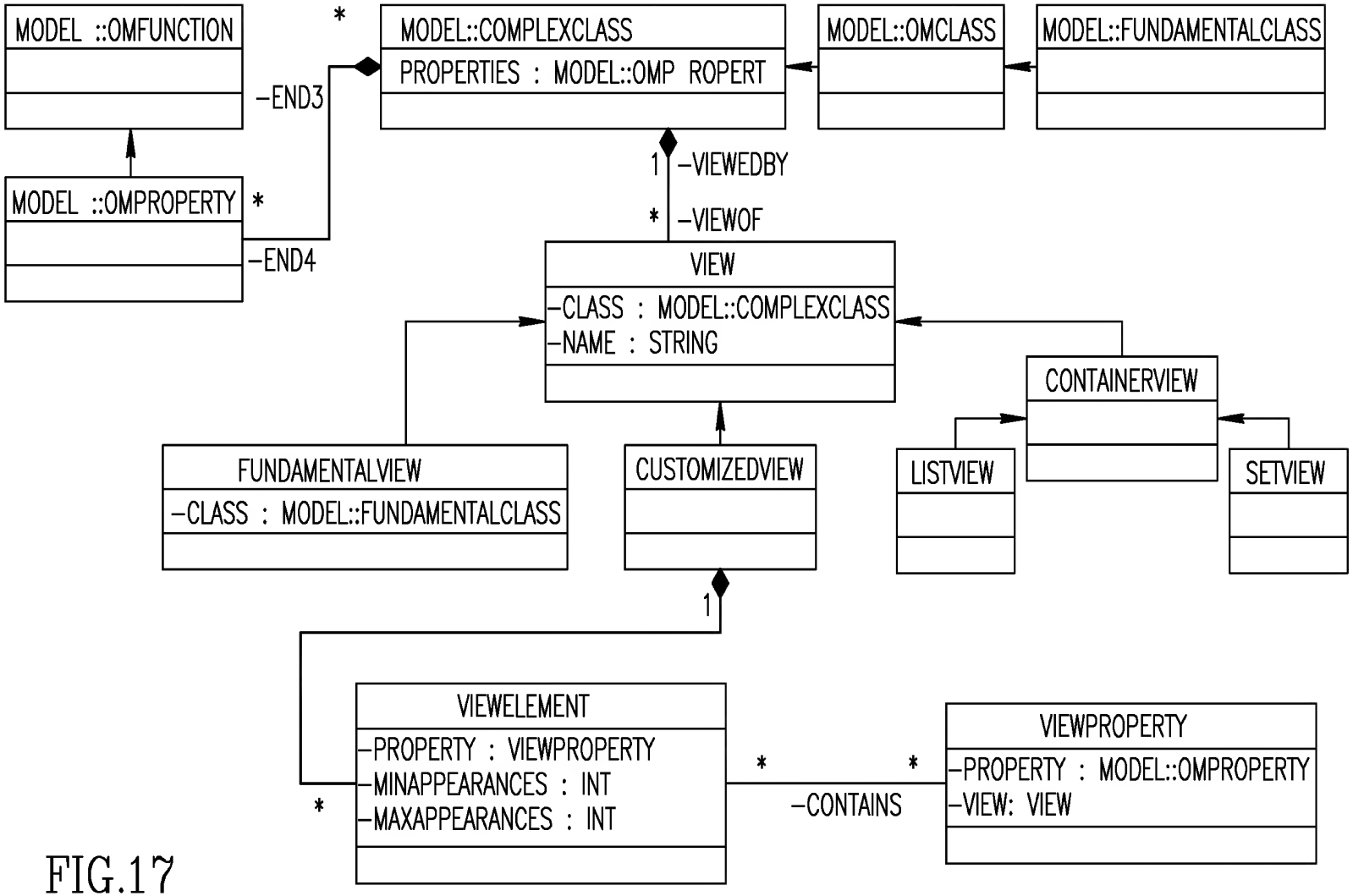

MODEL ::OMFUNCTION
MODEL::COMPLEXCLASS
PROPERTIES : MODEL::OMP ROPERT
MODEL::OMCLASS
MODEL::FUNDAMENTALCLASS
-END3
MODEL ::OMPROPERTY
-END4
1
-VIEWEDBY
-VIEWOF
VIEW
-CLASS : MODEL::COMPLEXCLASS
-NAME : STRING
CONTAINERVIEW
FUNDAMENTALVIEW
-CLASS : MODEL::FUNDAMENTALCLASS
CUSTOMIZEDVIEW
LISTVIEW
SETVIEW
VIEWELEMENT
-PROPERTY : VIEWPROPERTY
-MINAPPEARANCES : INT
-MAXAPPEARANCES : INT
-CONTAINS
VIEWPROPERTY
-PROPERTY : MODEL::OMPROPERTY
-VIEW: VIEW

FIG.17

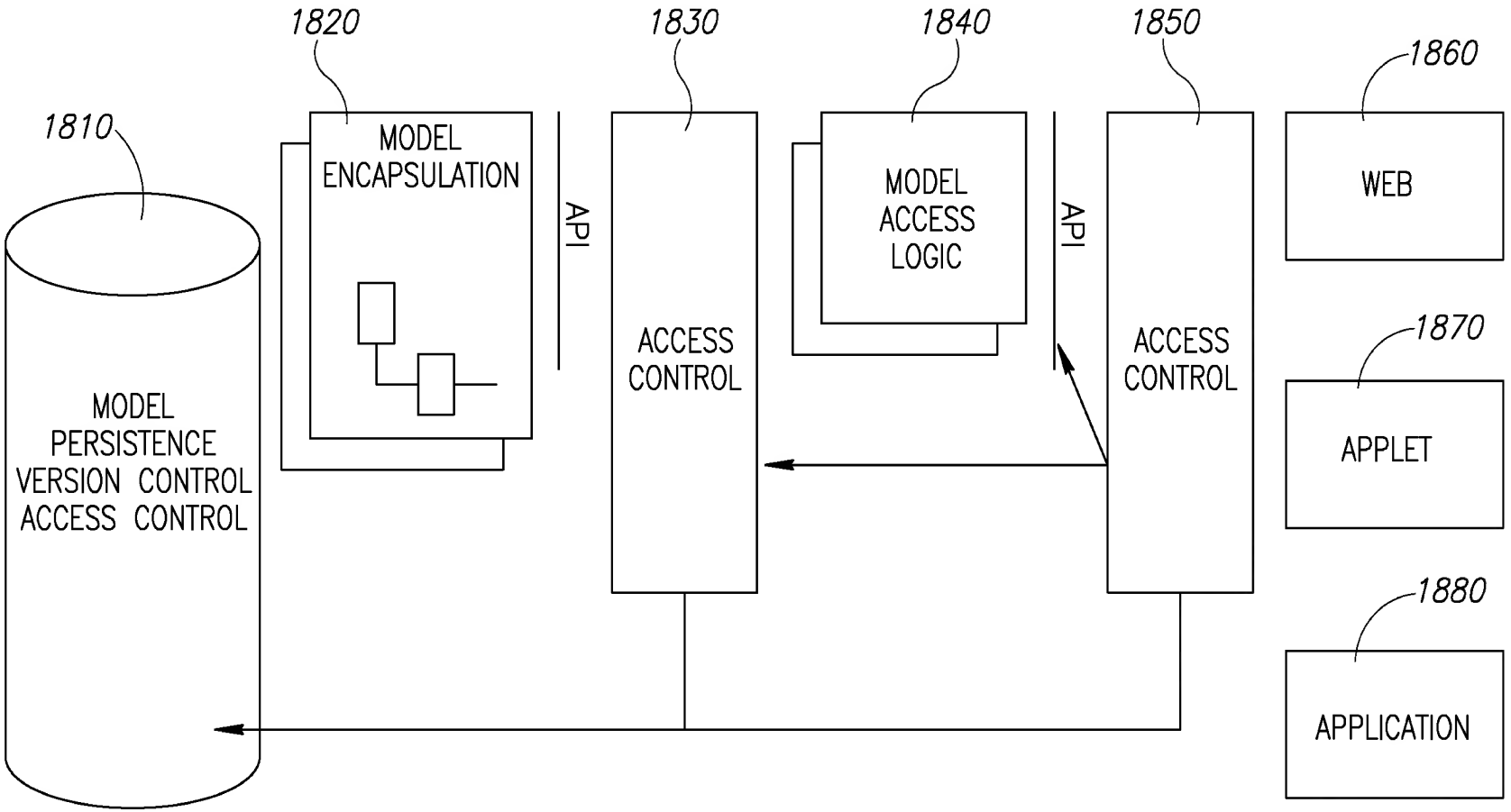

1820
1830
1840
1850
1860
1810
MODEL
ENCAPSULATION
API
ACCESS
CONTROL
MODEL
ACCESS
LOGIC
API
ACCESS
CONTROL
WEB
1870
APPLET
1880
APPLICATION
MODEL
PERSISTENCE
VERSION CONTROL
ACCESS CONTROL

FIG.18

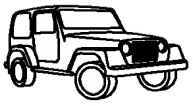


FIG.19A

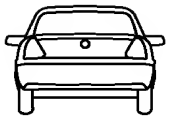


FIG.19B

FIG.19C

FIG.19D

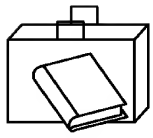


FIG.19E

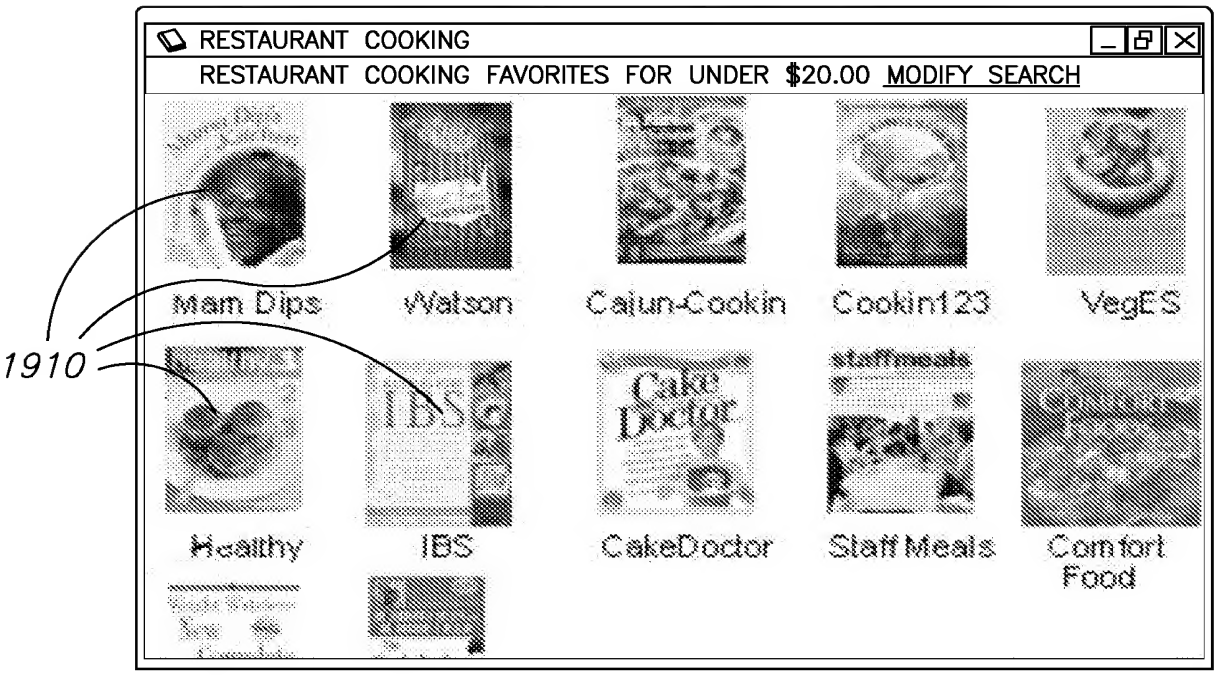


FIG.19F

FIG.20A

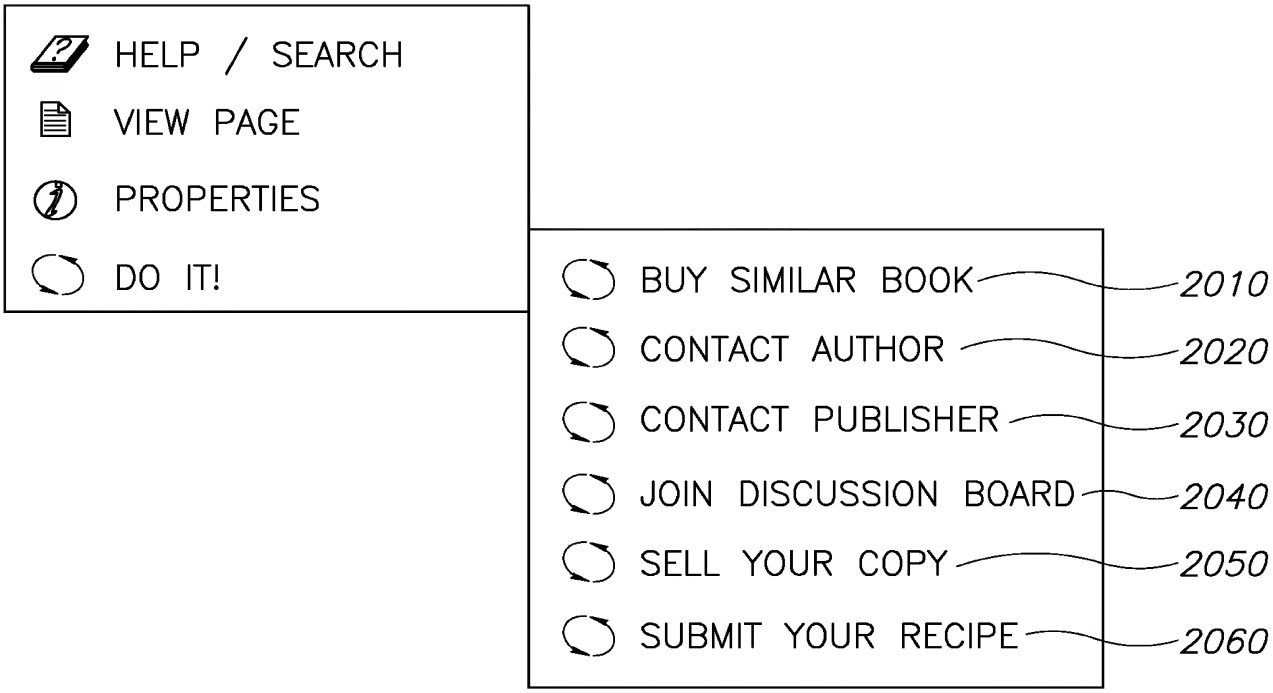


FIG.20B

FIG.21A

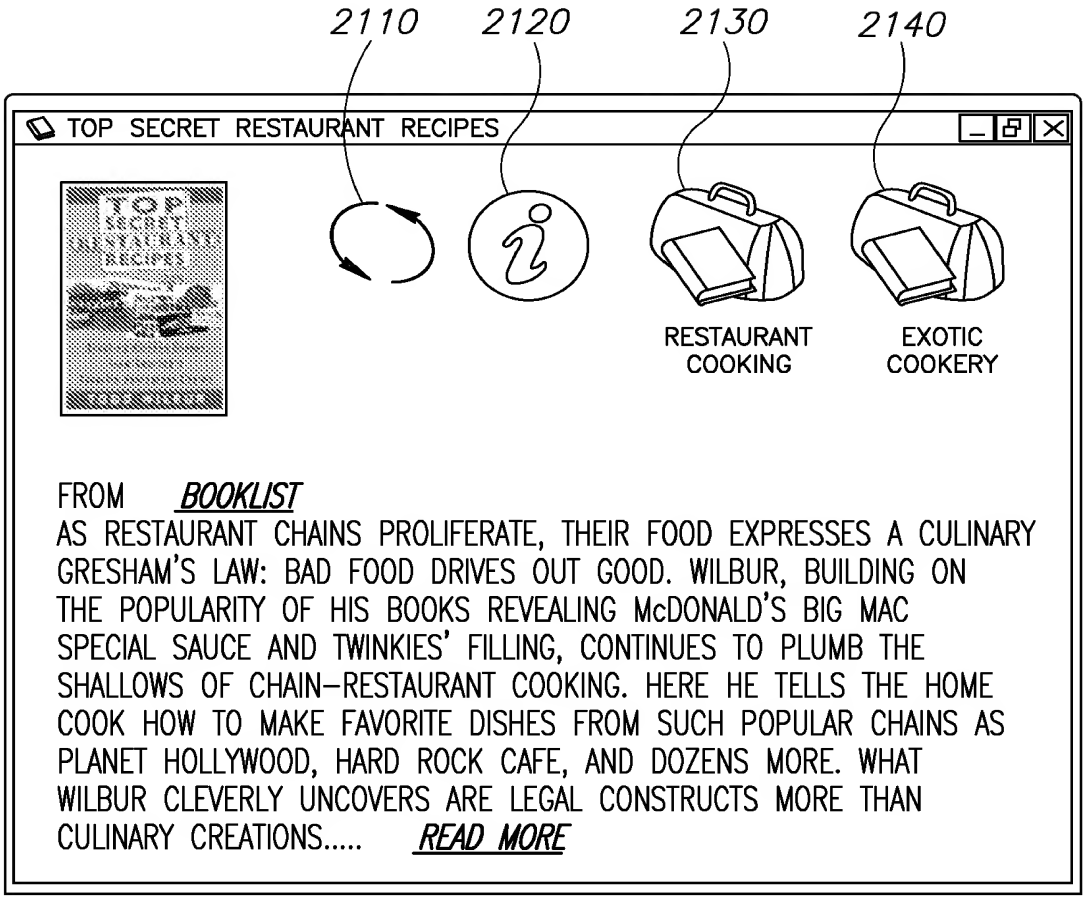


FIG.21B

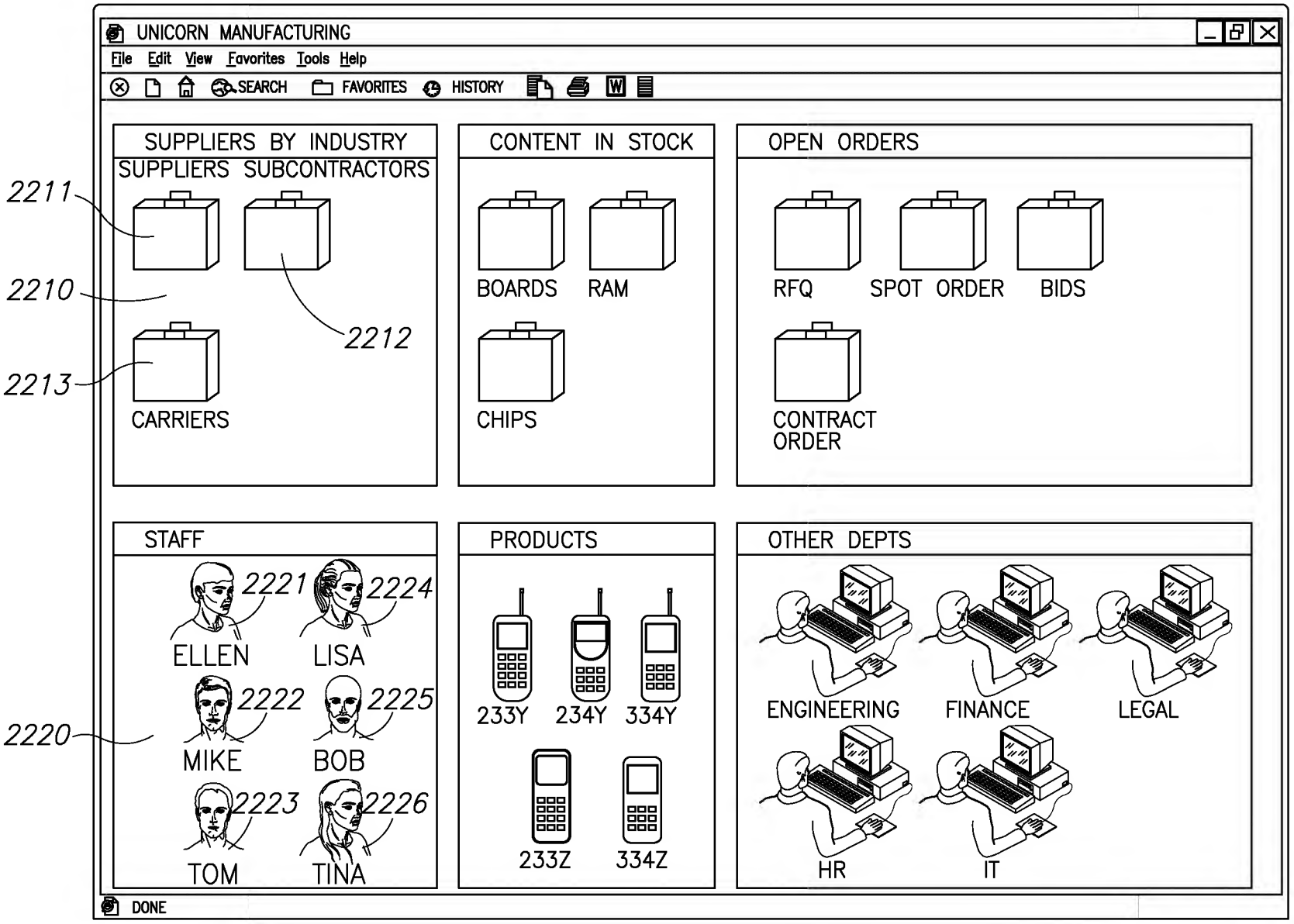

UNICORN MANUFACTURING
File Edit View Favorites Tools Help
SEARCH
FAVORITES
HISTORY
SUPPLIERS BY INDUSTRY
SUPPLIERS
SUBCONTRACTORS
CARRIERS
CONTENT IN STOCK
BOARDS
RAM
CHIPS
OPEN ORDERS
RFQ
SPOT ORDER
BIDS
CONTRACT ORDER
STAFF
ELLEN
LISA
MIKE
BOB
TOM
TINA
PRODUCTS
233Y
234Y
334Y
233Z
334Z
OTHER DEPTS
ENGINEERING
FINANCE
LEGAL
HR
IT
DONE
2211
2210
2212
2213
2220
2221
2224
2222
2225
2223
2226

FIG.22A

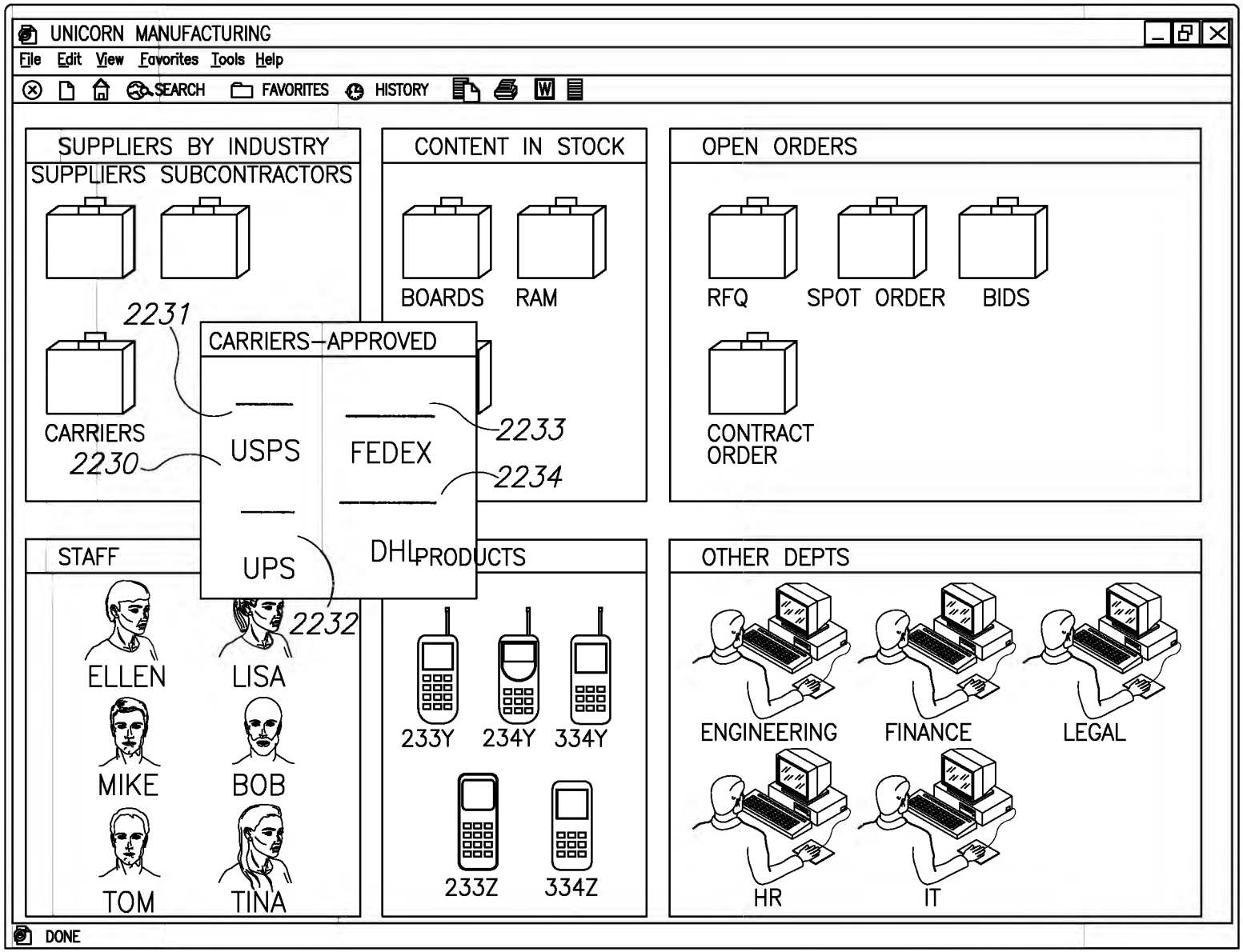

UNICORN MANUFACTURING
File Edit View Favorites Tools Help
SEARCH
FAVORITES
HISTORY
SUPPLIERS BY INDUSTRY
SUPPLIERS SUBCONTRACTORS
CARRIERS
2230
2231
CARRIERS–APPROVED
USPS
FEDEX
UPS
DHL
2232
2233
2234
CONTENT IN STOCK
BOARDS
RAM
PRODUCTS
OPEN ORDERS
RFQ
SPOT ORDER
BIDS
CONTRACT ORDER
STAFF
ELLEN
LISA
MIKE
BOB
TOM
TINA
233Y
234Y
334Y
233Z
334Z
OTHER DEPTS
ENGINEERING
FINANCE
LEGAL
HR
IT
DONE

FIG.22B

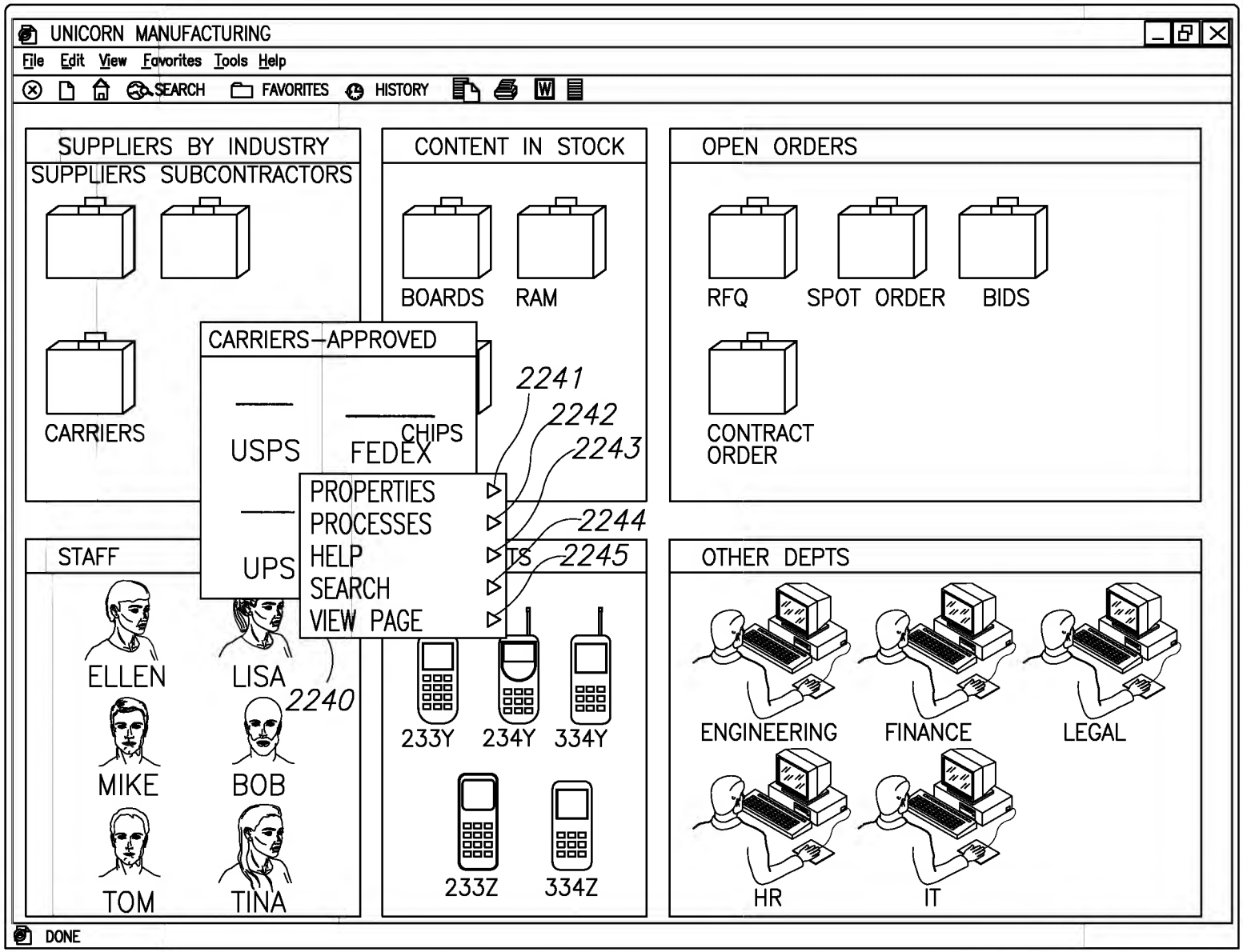

UNICORN MANUFACTURING
File Edit View Favorites Tools Help
SEARCH
FAVORITES
HISTORY
SUPPLIERS BY INDUSTRY
SUPPLIERS SUBCONTRACTORS
CARRIERS
CONTENT IN STOCK
BOARDS
RAM
OPEN ORDERS
RFQ
SPOT ORDER
BIDS
CONTRACT ORDER
CARRIERS–APPROVED
USPS
FEDEX
CHIPS
UPS
2241
2242
2243
2244
2245
PROPERTIES
PROCESSES
HELP
SEARCH
VIEW PAGE
STAFF
ELLEN
LISA
MIKE
BOB
TOM
TINA
2240
233Y
234Y
334Y
233Z
334Z
OTHER DEPTS
ENGINEERING
FINANCE
LEGAL
HR
IT
DONE

FIG.22C

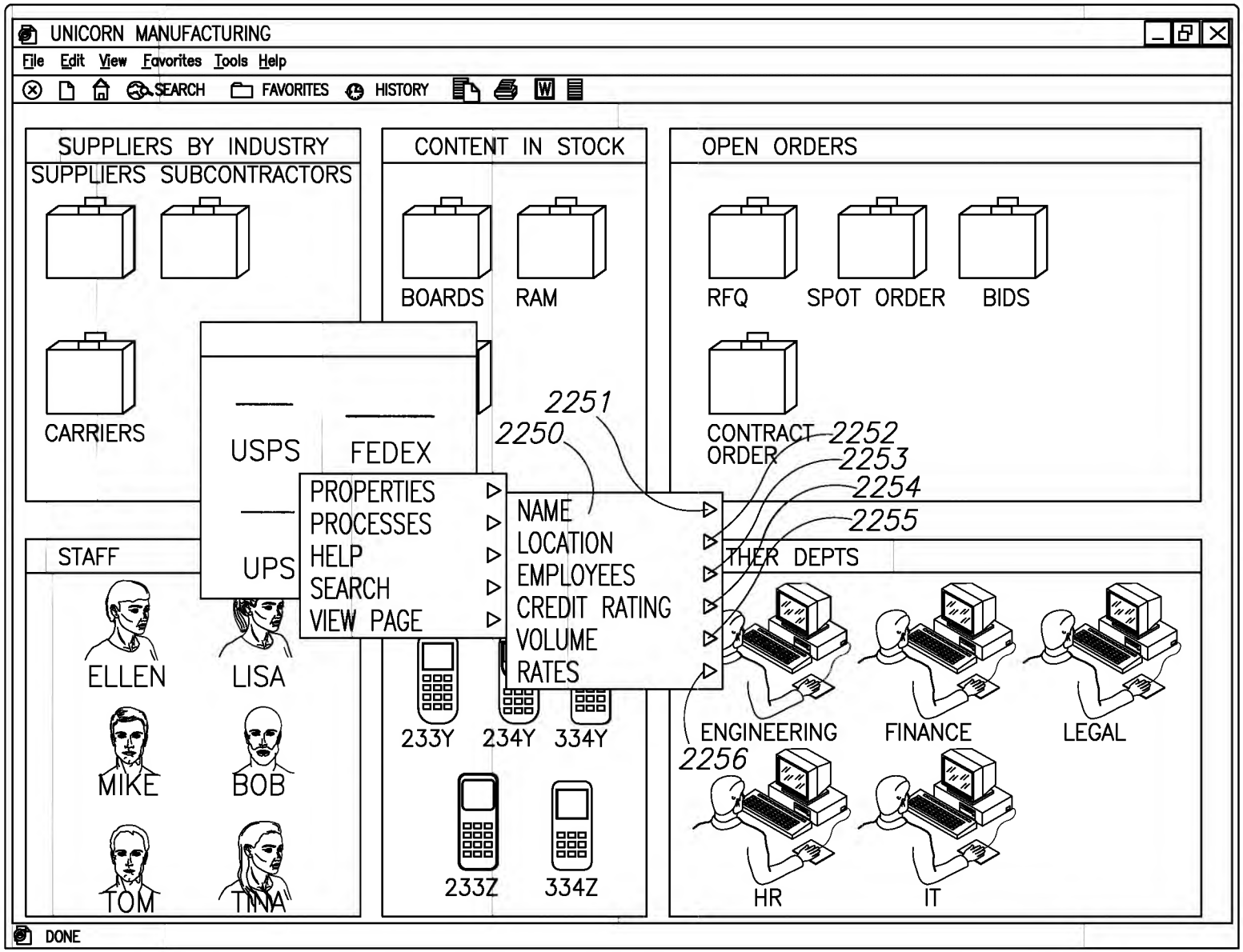

UNICORN MANUFACTURING
File Edit View Favorites Tools Help
SEARCH FAVORITES HISTORY
SUPPLIERS BY INDUSTRY
SUPPLIERS SUBCONTRACTORS
CARRIERS
CONTENT IN STOCK
BOARDS
RAM
OPEN ORDERS
RFQ
SPOT ORDER
BIDS
CONTRACT ORDER
USPS
FEDEX
UPS
2251
2250
2252
2253
2254
2255
PROPERTIES
PROCESSES
HELP
SEARCH
VIEW PAGE
NAME
LOCATION
EMPLOYEES
CREDIT RATING
VOLUME
RATES
STAFF
ELLEN
LISA
MIKE
BOB
TOM
TINA
233Y
234Y
334Y
233Z
334Z
THER DEPTS
ENGINEERING
FINANCE
LEGAL
2256
HR
IT
DONE

FIG.22D

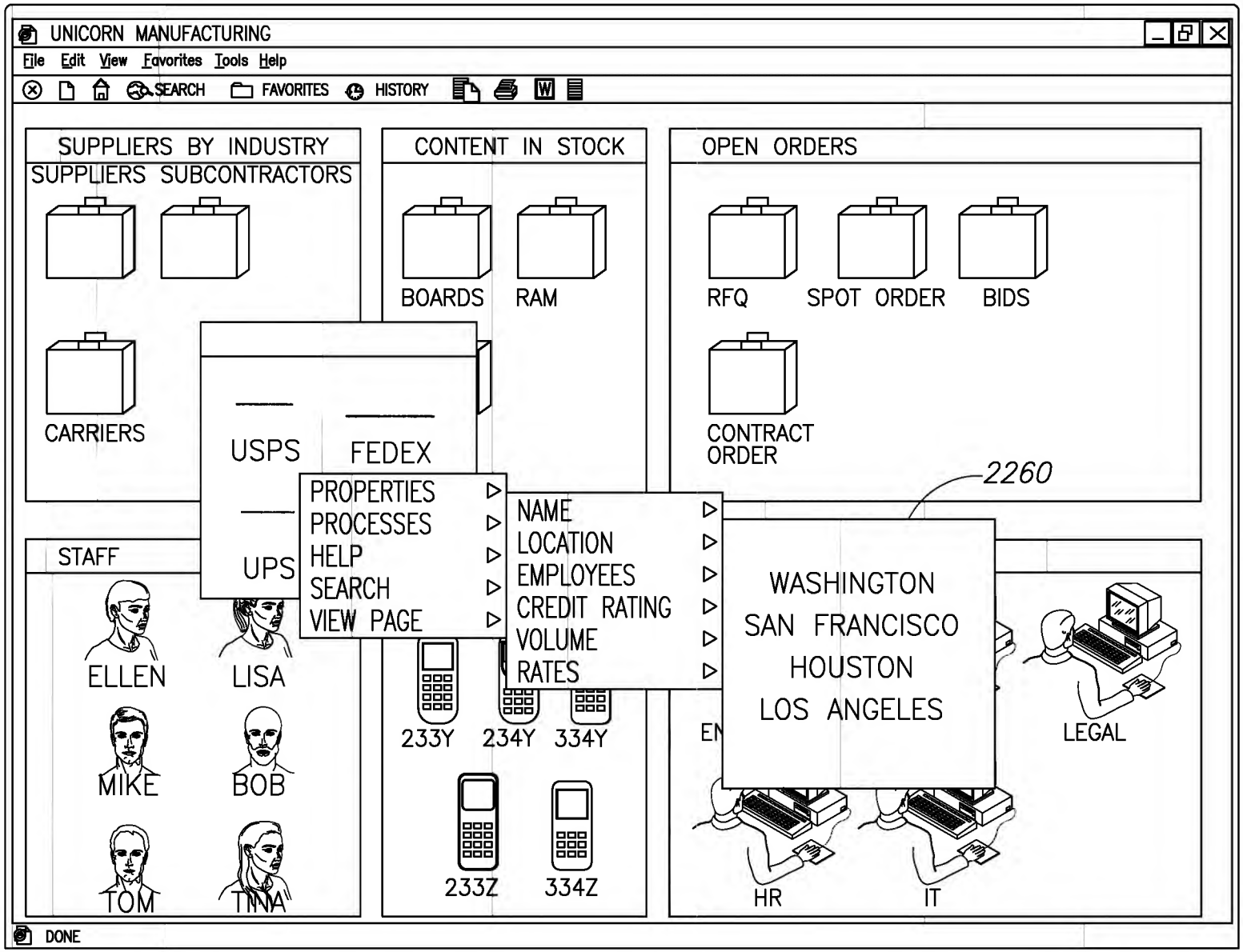

UNICORN MANUFACTURING
File Edit View Favorites Tools Help
SEARCH FAVORITES HISTORY
SUPPLIERS BY INDUSTRY
SUPPLIERS SUBCONTRACTORS
CARRIERS
CONTENT IN STOCK
BOARDS
RAM
OPEN ORDERS
RFQ
SPOT ORDER
BIDS
CONTRACT ORDER
USPS
FEDEX
UPS
PROPERTIES
PROCESSES
HELP
SEARCH
VIEW PAGE
NAME
LOCATION
EMPLOYEES
CREDIT RATING
VOLUME
RATES
2260
WASHINGTON
SAN FRANCISCO
HOUSTON
LOS ANGELES
STAFF
ELLEN
LISA
MIKE
BOB
TOM
TINA
233Y
234Y
334Y
233Z
334Z
LEGAL
HR
IT
DONE

FIG.22E

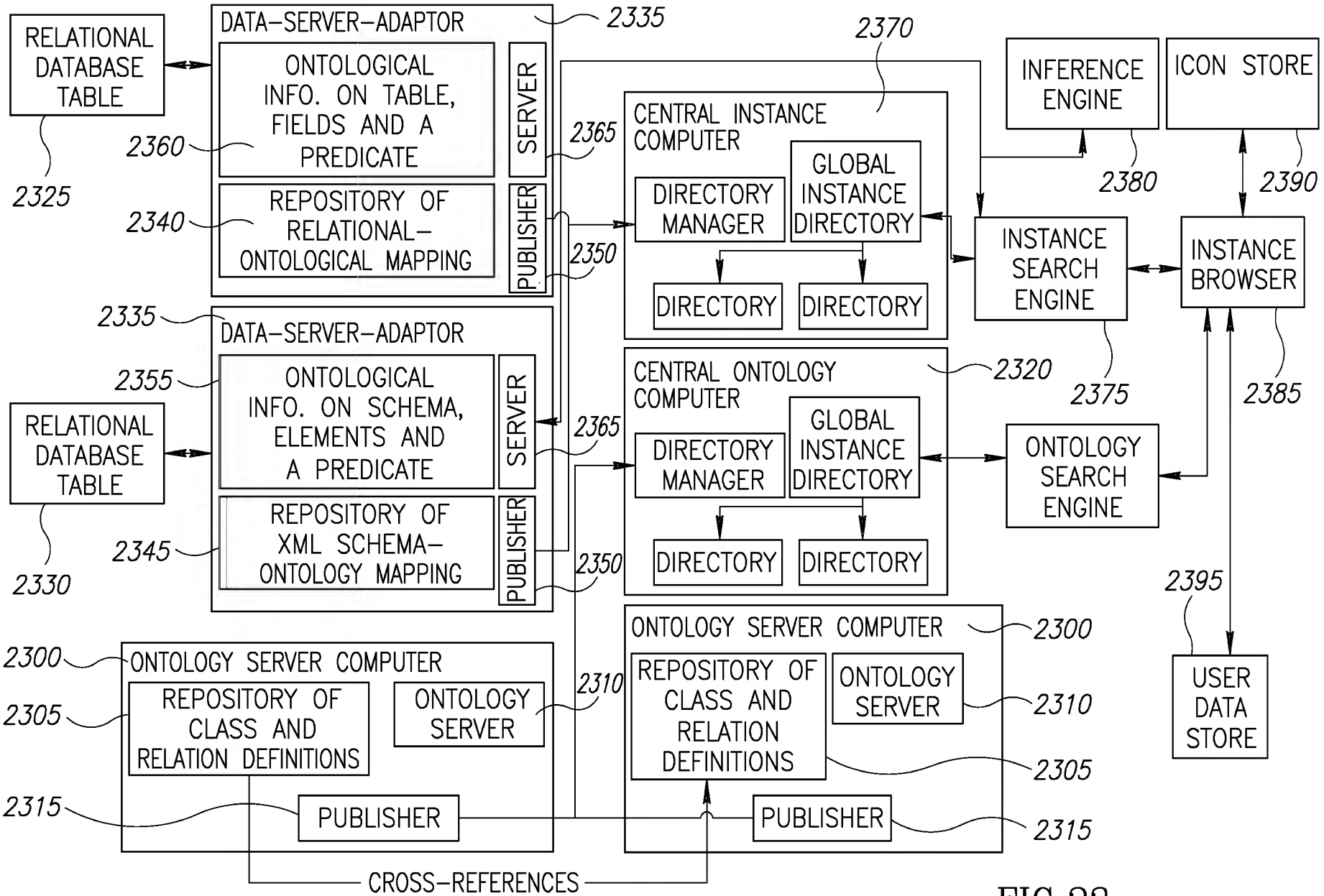

RELATIONAL DATABASE TABLE
2325
DATA-SERVER-ADAPTOR
2335
ONTOLOGICAL INFO. ON TABLE, FIELDS AND A PREDICATE
2360
SERVER
REPOSITORY OF RELATIONAL-ONTOLOGICAL MAPPING
2340
PUBLISHER
2350
2365
2370
CENTRAL INSTANCE COMPUTER
DIRECTORY MANAGER
GLOBAL INSTANCE DIRECTORY
DIRECTORY
DIRECTORY
INFERENCE ENGINE
2380
ICON STORE
2390
INSTANCE SEARCH ENGINE
INSTANCE BROWSER
2335
DATA-SERVER-ADAPTOR
2355
ONTOLOGICAL INFO. ON SCHEMA, ELEMENTS AND A PREDICATE
SERVER
2365
RELATIONAL DATABASE TABLE
2330
REPOSITORY OF XML SCHEMA-ONTOLOGY MAPPING
2345
PUBLISHER
2350
CENTRAL ONTOLOGY COMPUTER
2320
DIRECTORY MANAGER
GLOBAL INSTANCE DIRECTORY
DIRECTORY
DIRECTORY
2375
2385
ONTOLOGY SEARCH ENGINE
2395
USER DATA STORE
2300
ONTOLOGY SERVER COMPUTER
REPOSITORY OF CLASS AND RELATION DEFINITIONS
2305
ONTOLOGY SERVER
2310
PUBLISHER
2315
2300
ONTOLOGY SERVER COMPUTER
REPOSITORY OF CLASS AND RELATION DEFINITIONS
2305
ONTOLOGY SERVER
2310
PUBLISHER
2315
CROSS-REFERENCES

FIG.23

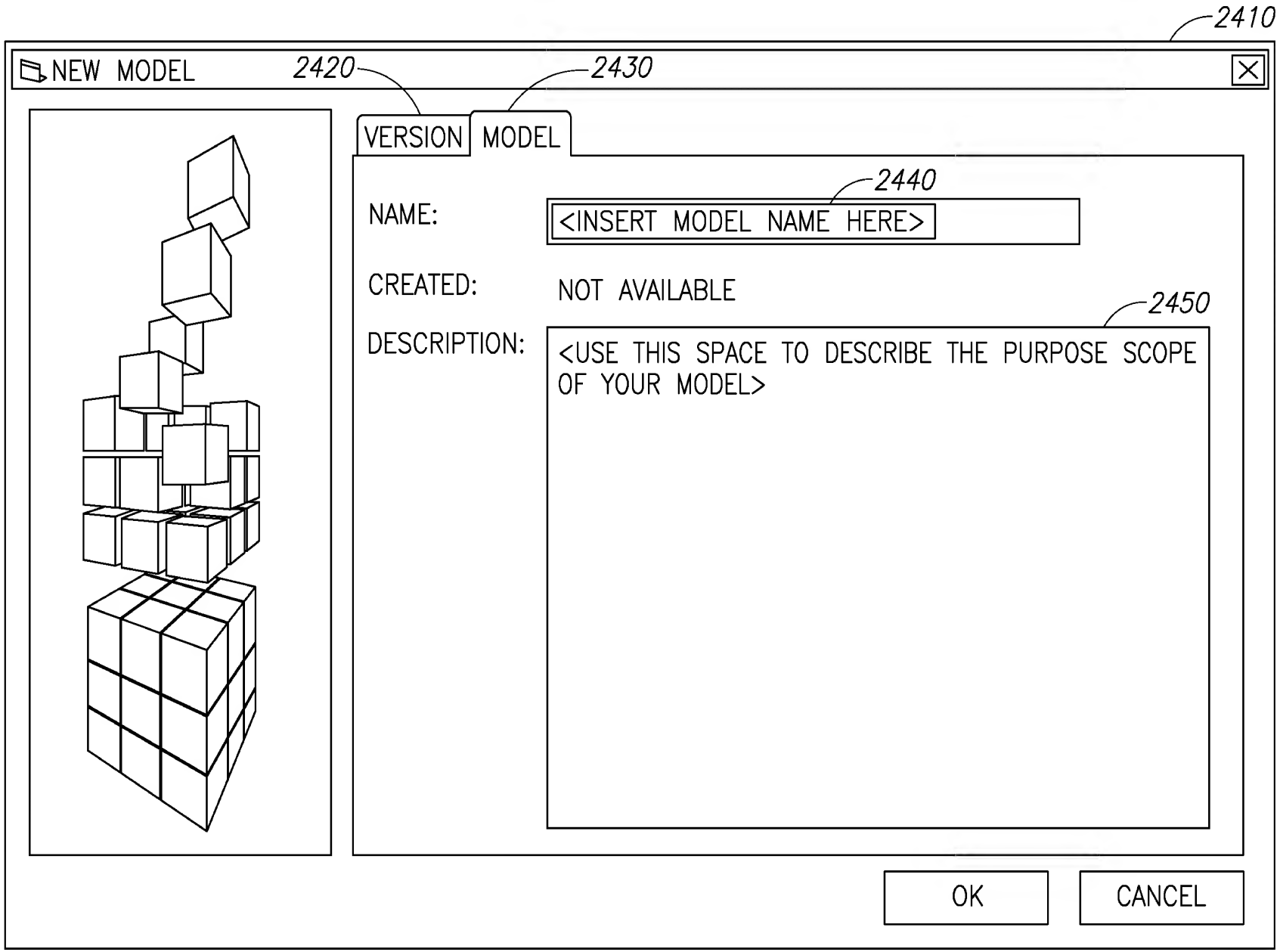

2410
NEW MODEL
2420
2430
VERSION
MODEL
2440
NAME:
<INSERT MODEL NAME HERE>
CREATED:
NOT AVAILABLE
2450
DESCRIPTION:
<USE THIS SPACE TO DESCRIBE THE PURPOSE SCOPE OF YOUR MODEL>
OK
CANCEL

FIG.24A

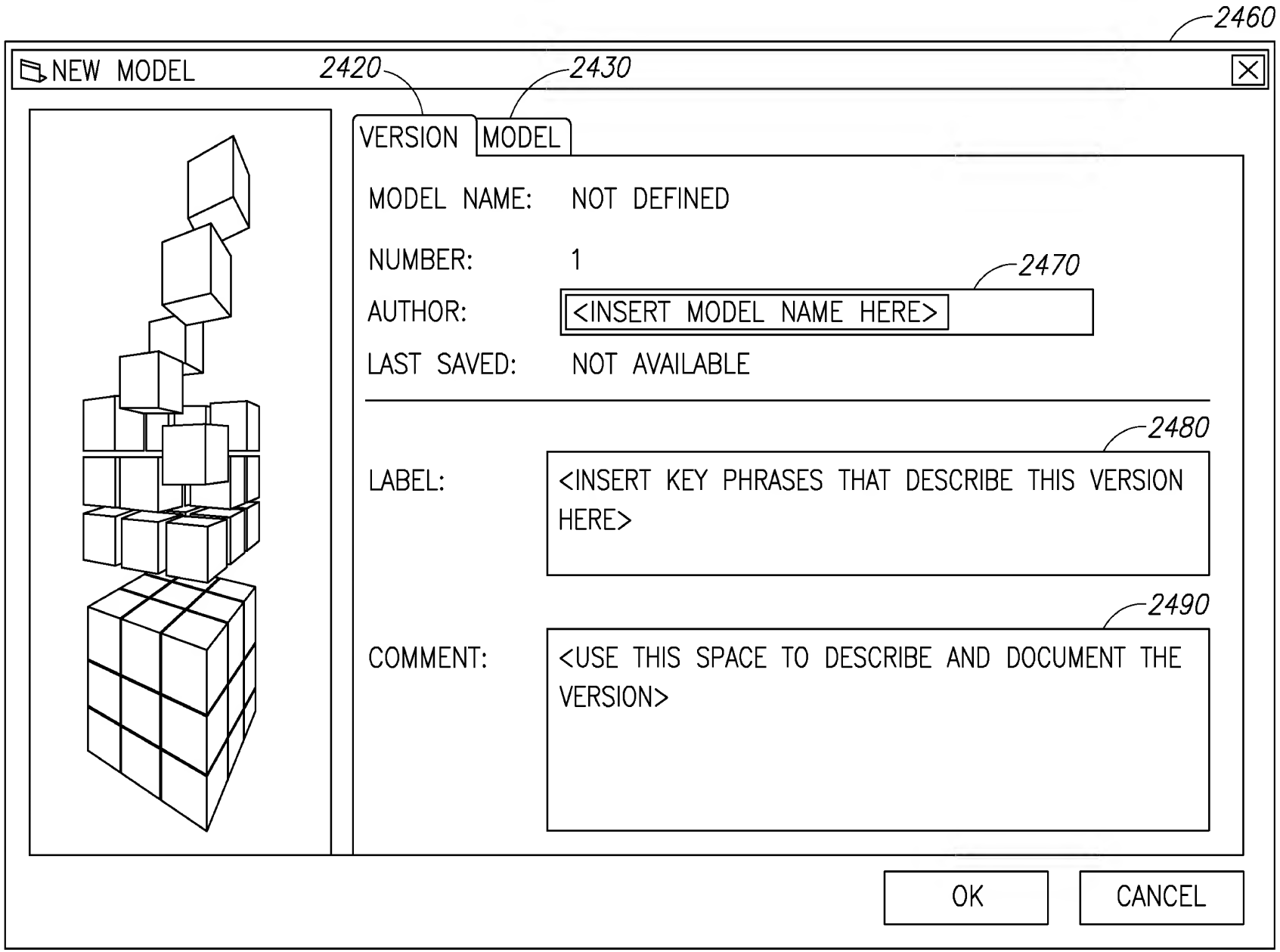

2460
NEW MODEL
2420
2430
VERSION
MODEL
MODEL NAME: NOT DEFINED
NUMBER: 1
2470
AUTHOR: <INSERT MODEL NAME HERE>
LAST SAVED: NOT AVAILABLE
2480
LABEL: <INSERT KEY PHRASES THAT DESCRIBE THIS VERSION HERE>
2490
COMMENT: <USE THIS SPACE TO DESCRIBE AND DOCUMENT THE VERSION>
OK
CANCEL

FIG.24B

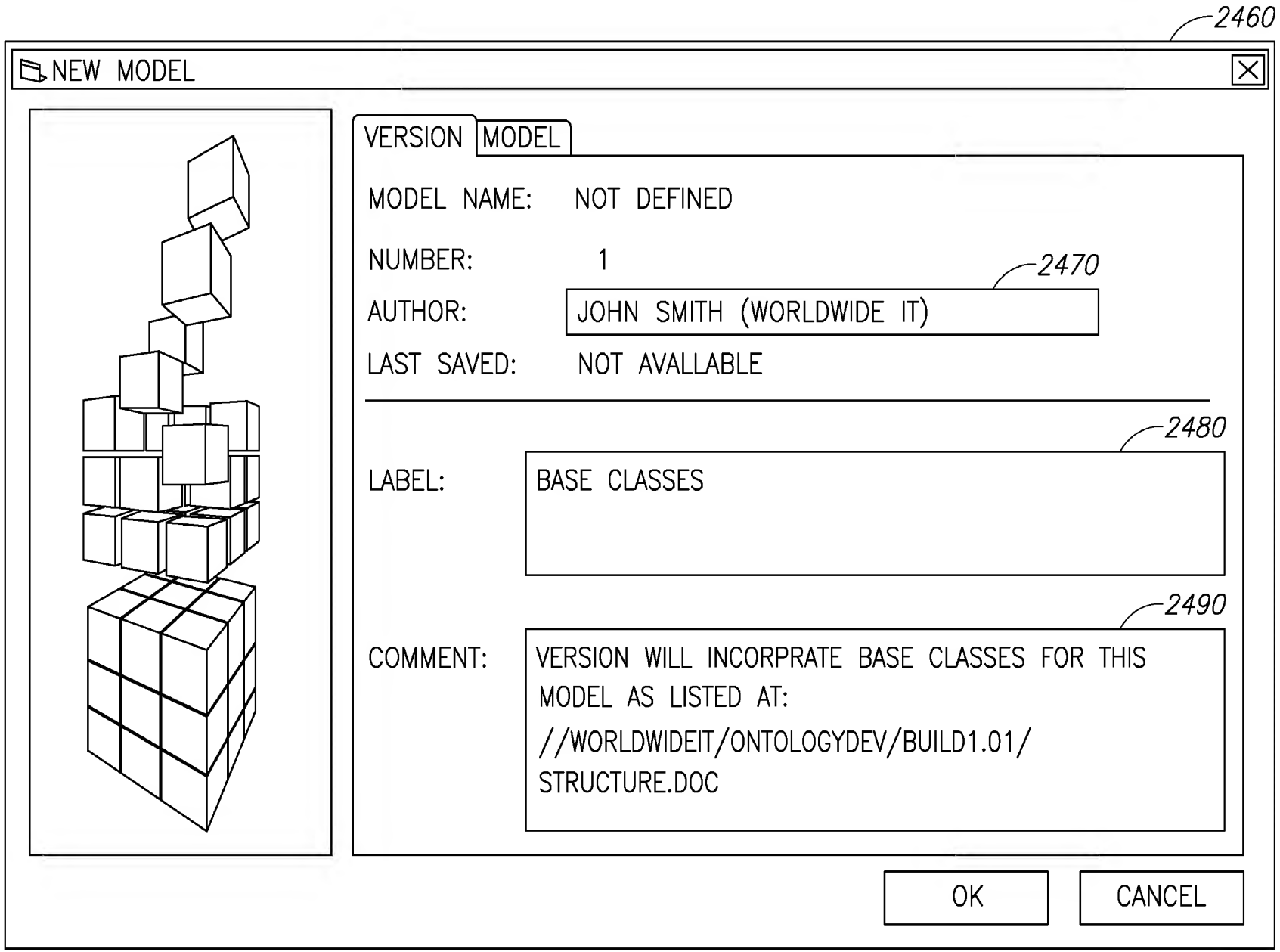

2460
NEW MODEL
VERSION
MODEL
MODEL NAME: NOT DEFINED
NUMBER: 1
2470
AUTHOR: JOHN SMITH (WORLDWIDE IT)
LAST SAVED: NOT AVALLABLE
2480
LABEL: BASE CLASSES
2490
COMMENT: VERSION WILL INCORPRATE BASE CLASSES FOR THIS MODEL AS LISTED AT: //WORLDWIDEIT/ONTOLOGYDEV/BUILD1.01/ STRUCTURE.DOC
OK
CANCEL

FIG.24C

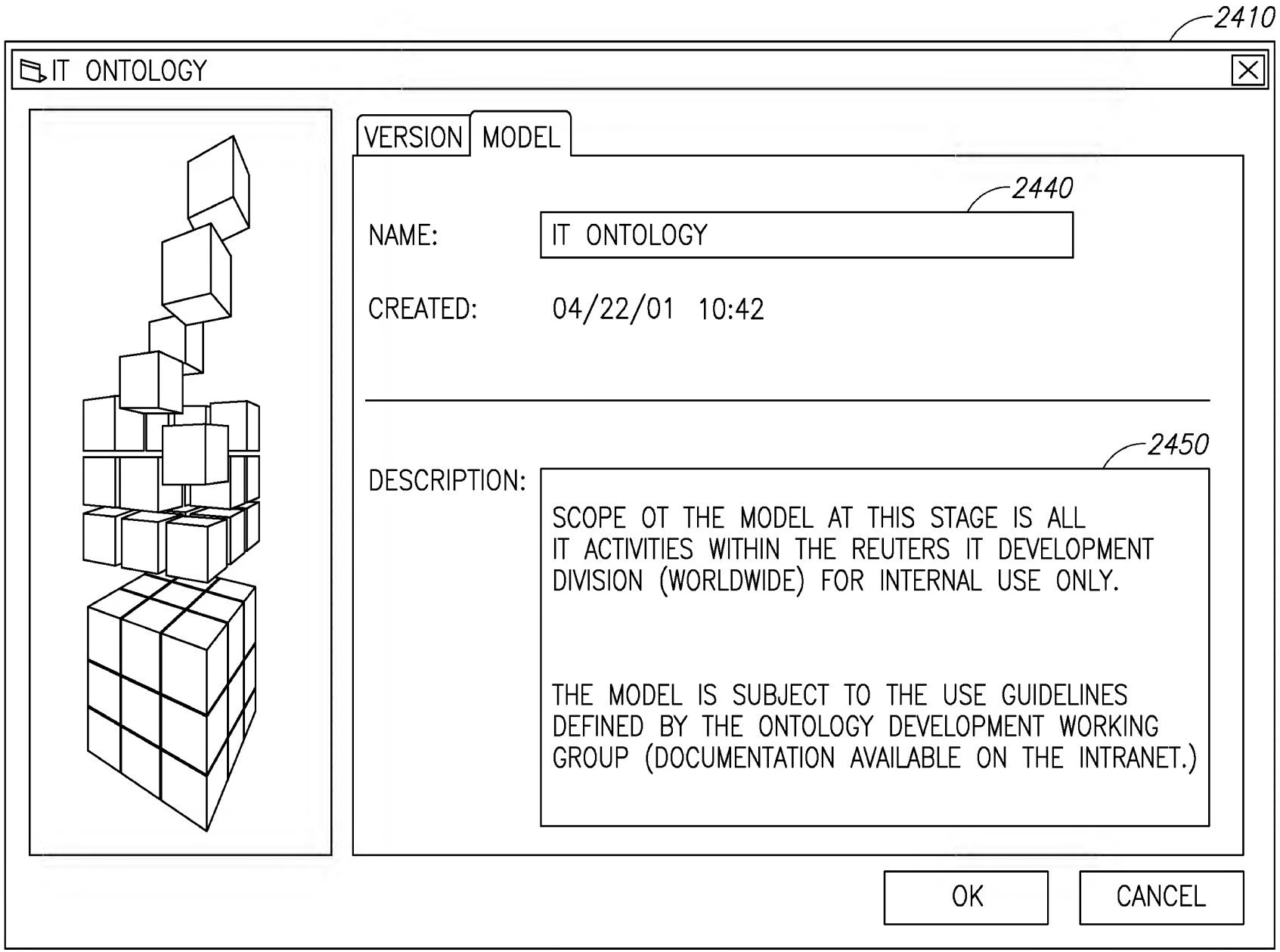

2410
IT ONTOLOGY
VERSION
MODEL
2440
NAME:
IT ONTOLOGY
CREATED:
04/22/01 10:42
2450
DESCRIPTION:
SCOPE OT THE MODEL AT THIS STAGE IS ALL IT ACTIVITIES WITHIN THE REUTERS IT DEVELOPMENT DIVISION (WORLDWIDE) FOR INTERNAL USE ONLY.
THE MODEL IS SUBJECT TO THE USE GUIDELINES DEFINED BY THE ONTOLOGY DEVELOPMENT WORKING GROUP (DOCUMENTATION AVAILABLE ON THE INTRANET.)
OK
CANCEL

FIG.24D

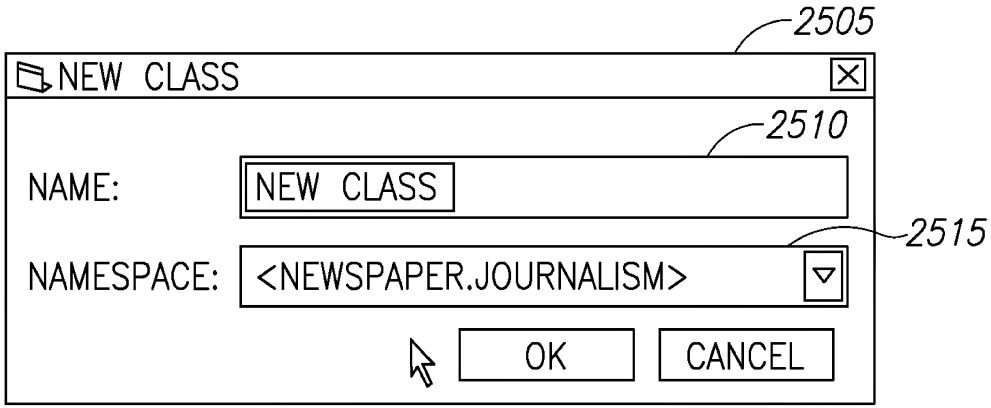


FIG.25A

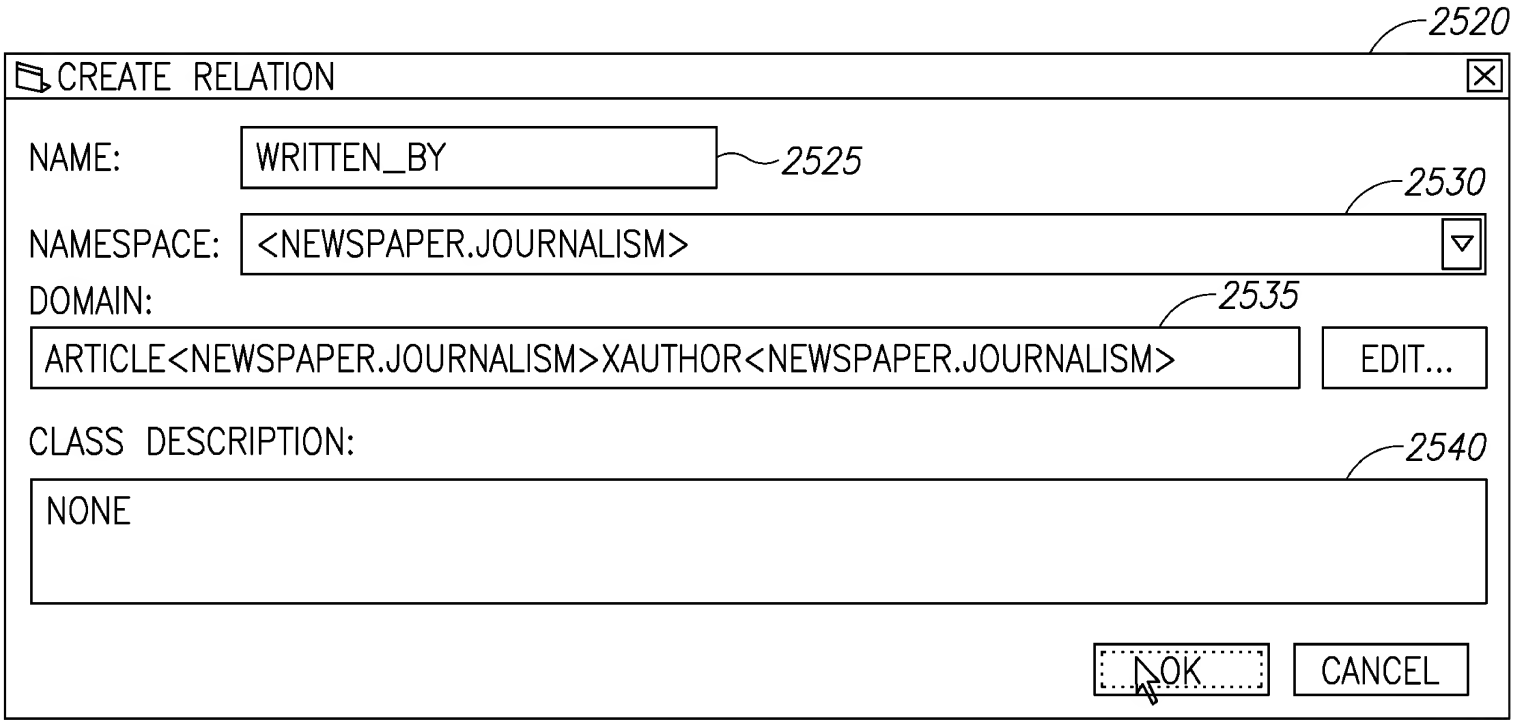


FIG.25B

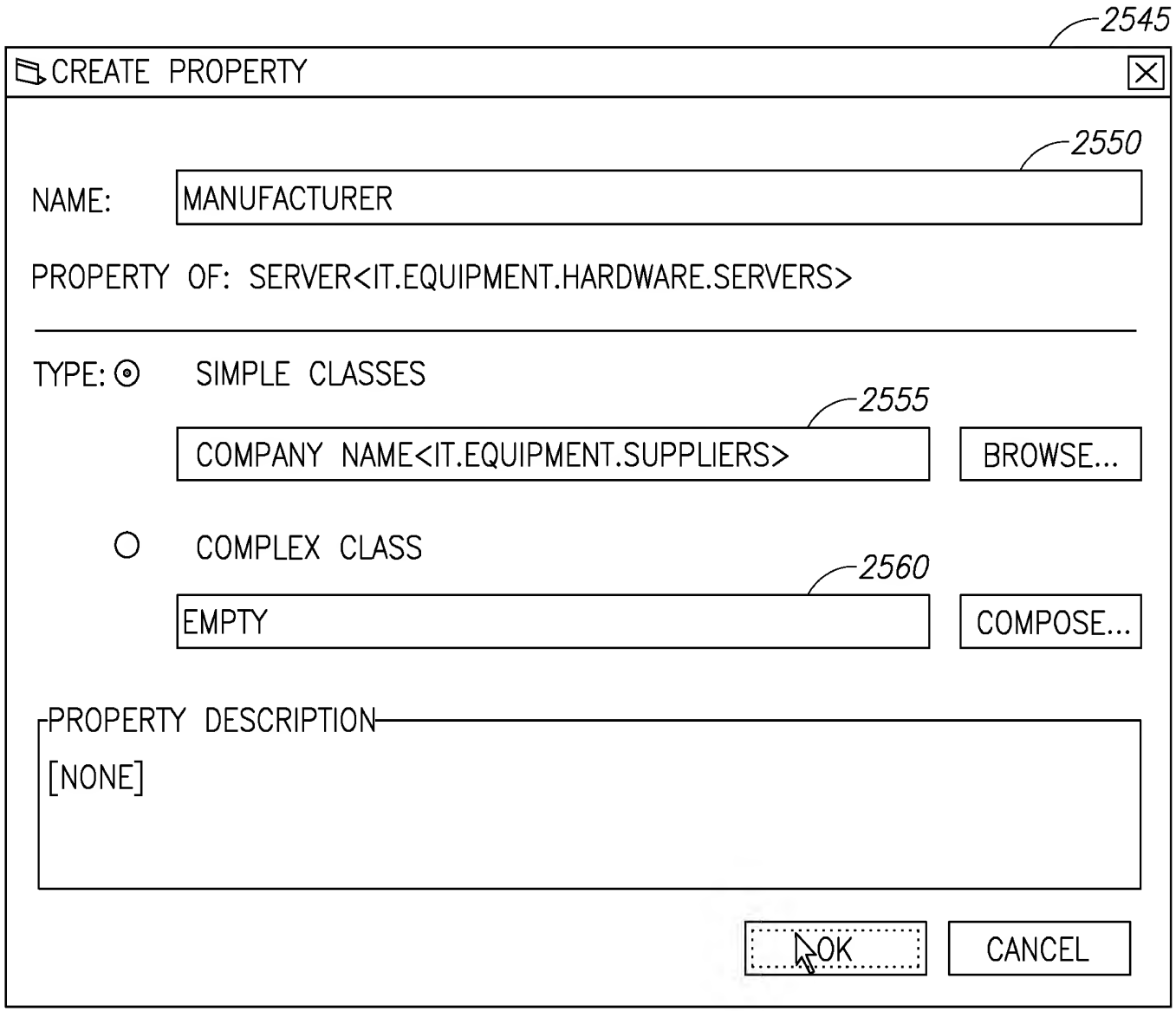

2545
CREATE PROPERTY
2550
NAME:
MANUFACTURER
PROPERTY OF: SERVER<IT.EQUIPMENT.HARDWARE.SERVERS>
TYPE:
SIMPLE CLASSES
2555
COMPANY NAME<IT.EQUIPMENT.SUPPLIERS>
BROWSE...
COMPLEX CLASS
2560
EMPTY
COMPOSE...
PROPERTY DESCRIPTION
[NONE]
OK
CANCEL

FIG.25C

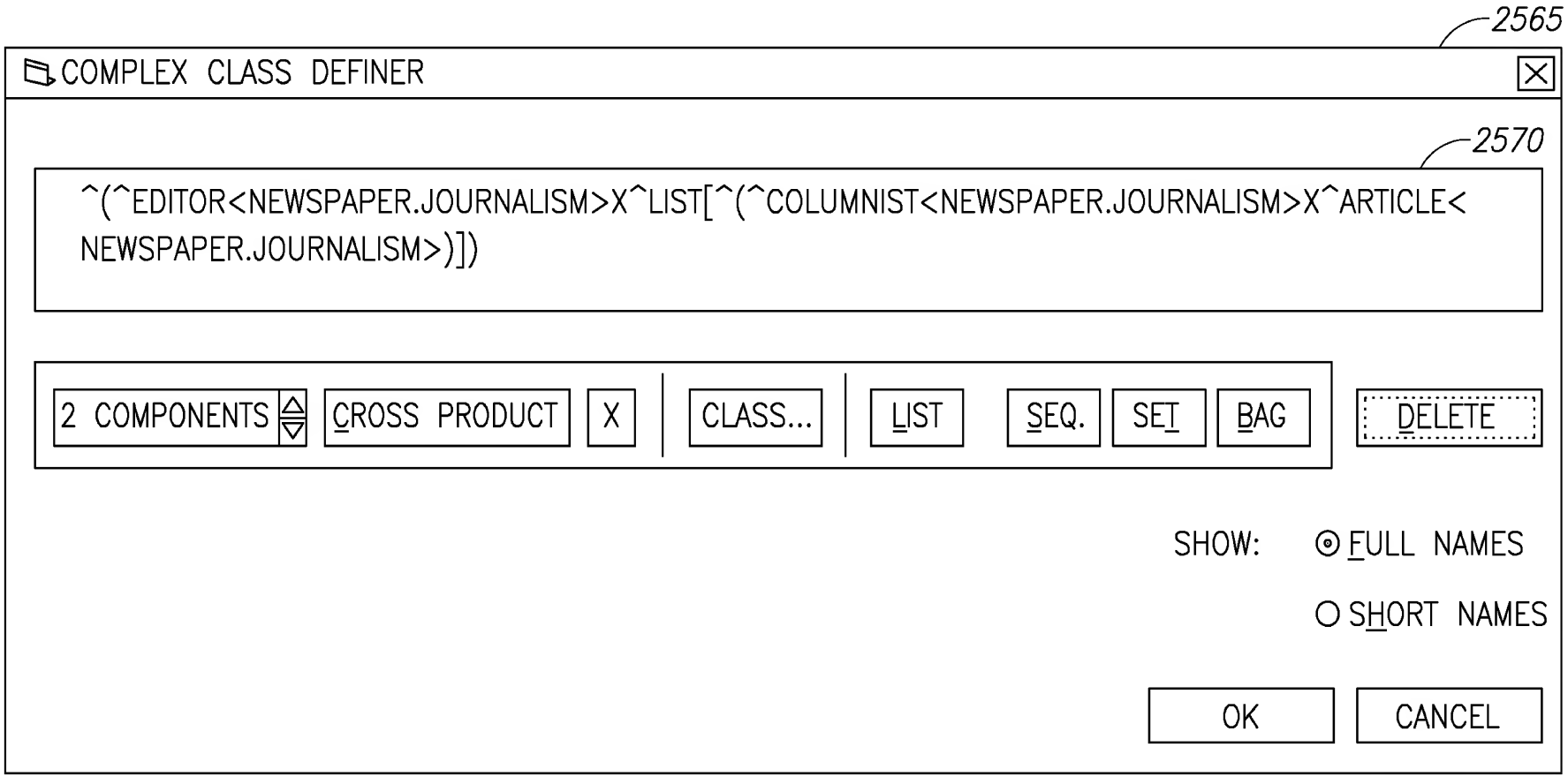

2565
COMPLEX CLASS DEFINER
2570
^(^EDITOR<NEWSPAPER.JOURNALISM>X^LIST[^(^COLUMNIST<NEWSPAPER.JOURNALISM>X^ARTICLE<
NEWSPAPER.JOURNALISM>)])
2 COMPONENTS
CROSS PRODUCT
X
CLASS...
LIST
SEQ.
SET
BAG
DELETE
SHOW:
FULL NAMES
SHORT NAMES
OK
CANCEL

FIG.25D

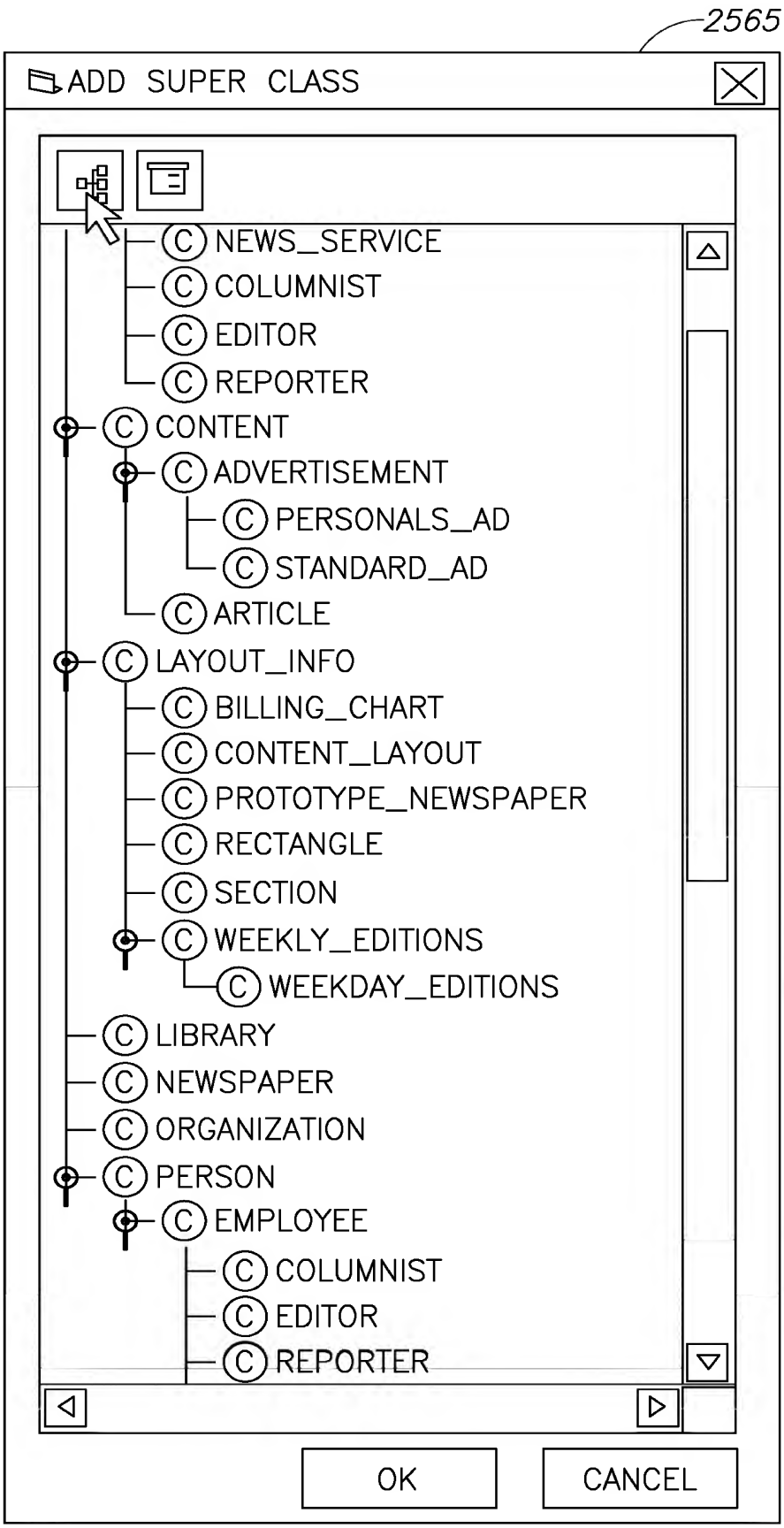

2565
ADD SUPER CLASS
NEWS_SERVICE
COLUMNIST
EDITOR
REPORTER
CONTENT
ADVERTISEMENT
PERSONALS_AD
STANDARD_AD
ARTICLE
LAYOUT_INFO
BILLING_CHART
CONTENT_LAYOUT
PROTOTYPE_NEWSPAPER
RECTANGLE
SECTION
WEEKLY_EDITIONS
WEEKDAY_EDITIONS
LIBRARY
NEWSPAPER
ORGANIZATION
PERSON
EMPLOYEE
COLUMNIST
EDITOR
REPORTER
OK
CANCEL

FIG.25E

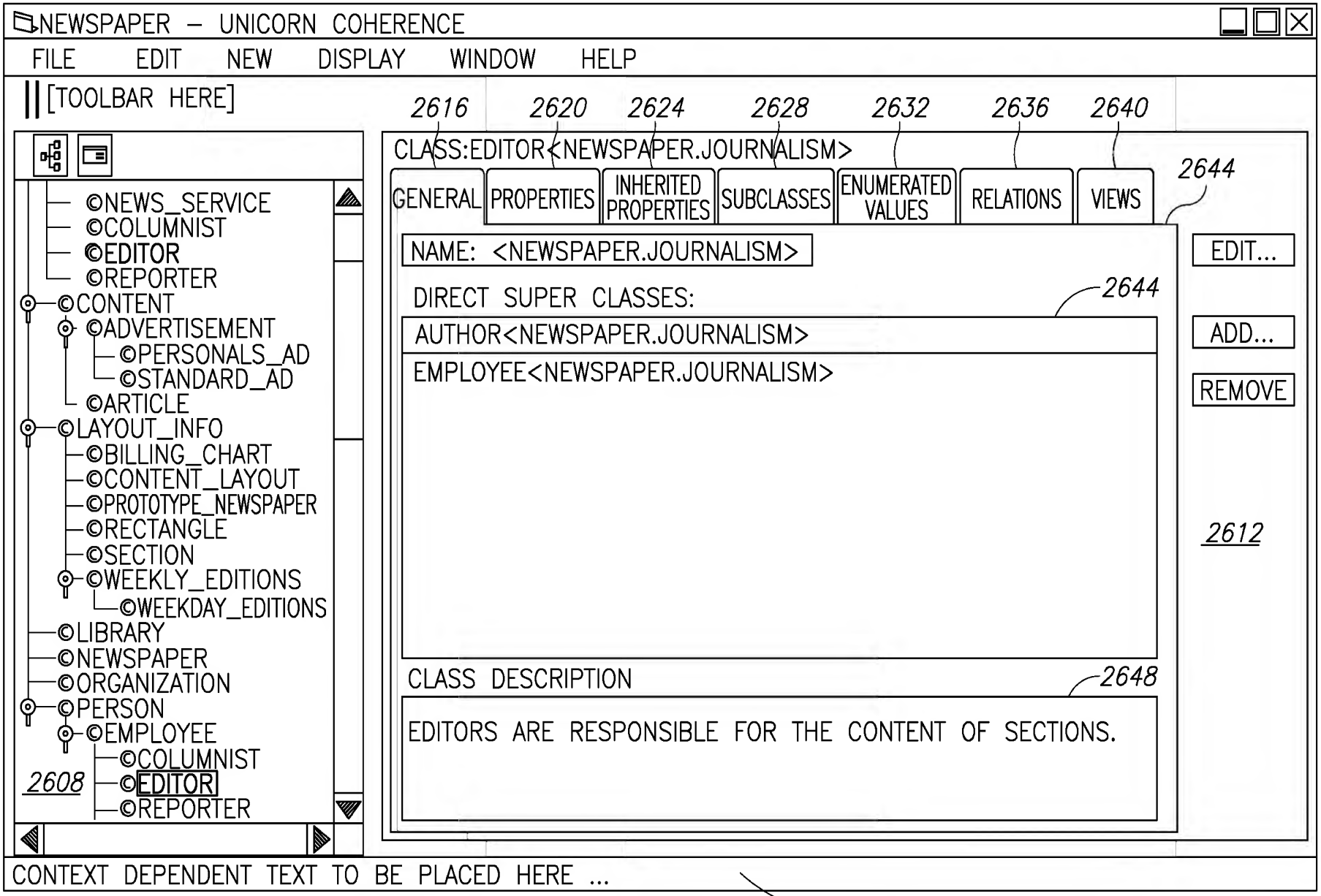

NEWSPAPER – UNICORN COHERENCE
FILE EDIT NEW DISPLAY WINDOW HELP
[TOOLBAR HERE]
2616 2620 2624 2628 2632 2636 2640
©NEWS_SERVICE
©COLUMNIST
©EDITOR
©REPORTER
©CONTENT
©ADVERTISEMENT
©PERSONALS_AD
©STANDARD_AD
©ARTICLE
©LAYOUT_INFO
©BILLING_CHART
©CONTENT_LAYOUT
©PROTOTYPE_NEWSPAPER
©RECTANGLE
©SECTION
©WEEKLY_EDITIONS
©WEEKDAY_EDITIONS
©LIBRARY
©NEWSPAPER
©ORGANIZATION
©PERSON
©EMPLOYEE
©COLUMNIST
2608
©EDITOR
©REPORTER
CLASS:EDITOR<NEWSPAPER.JOURNALISM>
GENERAL
PROPERTIES
INHERITED PROPERTIES
SUBCLASSES
ENUMERATED VALUES
RELATIONS
VIEWS
2644
NAME: <NEWSPAPER.JOURNALISM>
EDIT...
DIRECT SUPER CLASSES:
2644
AUTHOR<NEWSPAPER.JOURNALISM>
EMPLOYEE<NEWSPAPER.JOURNALISM>
ADD...
REMOVE
2612
CLASS DESCRIPTION
2648
EDITORS ARE RESPONSIBLE FOR THE CONTENT OF SECTIONS.
CONTEXT DEPENDENT TEXT TO BE PLACED HERE ...
2604

FIG.26A

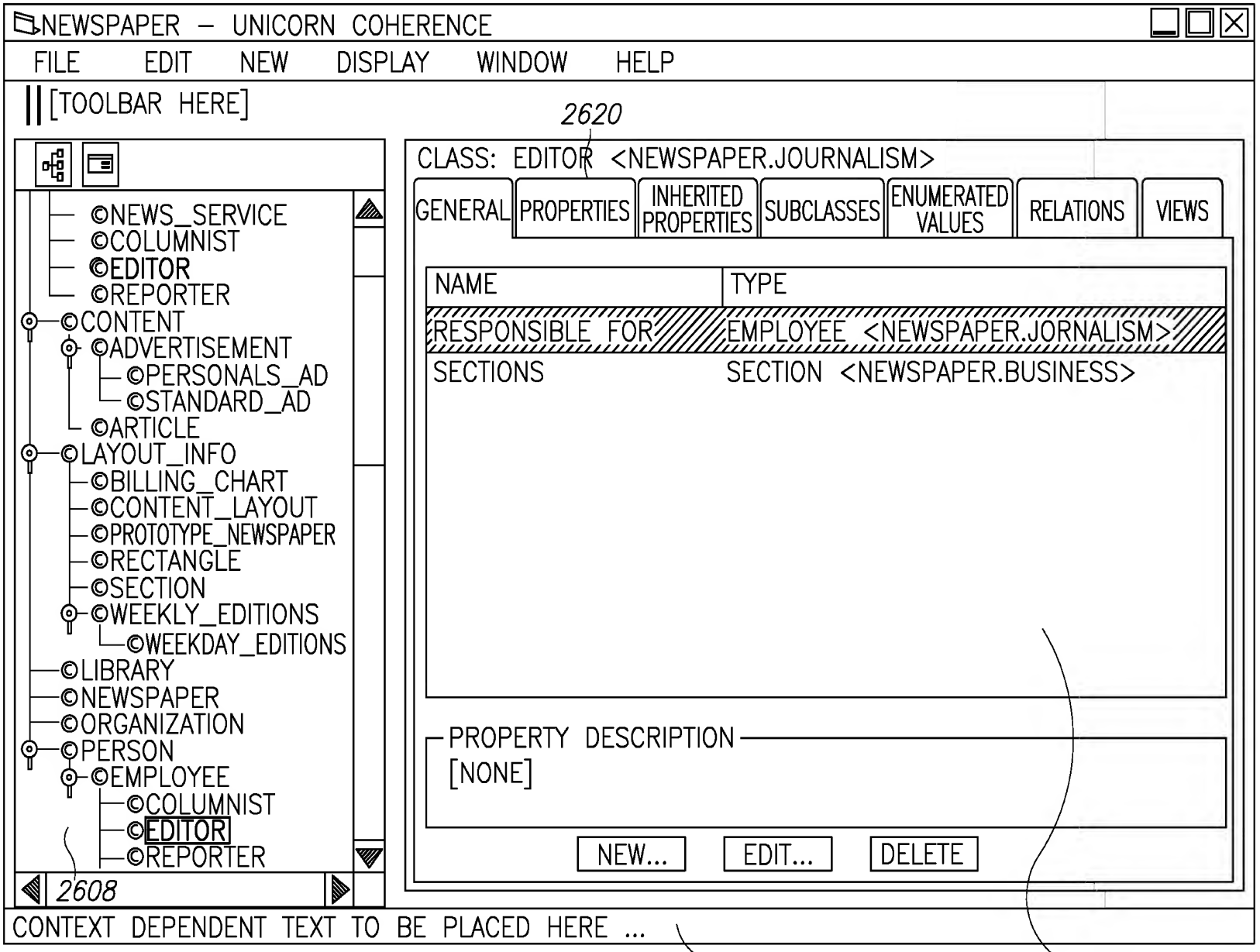

NEWSPAPER – UNICORN COHERENCE
FILE
EDIT
NEW
DISPLAY
WINDOW
HELP
[TOOLBAR HERE]
2620
CLASS: EDITOR <NEWSPAPER.JOURNALISM>
GENERAL
PROPERTIES
INHERITED PROPERTIES
SUBCLASSES
ENUMERATED VALUES
RELATIONS
VIEWS
NAME
TYPE
RESPONSIBLE_FOR
EMPLOYEE <NEWSPAPER.JORNALISM>
SECTIONS
SECTION <NEWSPAPER.BUSINESS>
PROPERTY DESCRIPTION
[NONE]
NEW...
EDIT...
DELETE
©NEWS_SERVICE
©COLUMNIST
©EDITOR
©REPORTER
©CONTENT
©ADVERTISEMENT
©PERSONALS_AD
©STANDARD_AD
©ARTICLE
©LAYOUT_INFO
©BILLING_CHART
©CONTENT_LAYOUT
©PROTOTYPE_NEWSPAPER
©RECTANGLE
©SECTION
©WEEKLY_EDITIONS
©WEEKDAY_EDITIONS
©LIBRARY
©NEWSPAPER
©ORGANIZATION
©PERSON
©EMPLOYEE
©COLUMNIST
©EDITOR
©REPORTER
2608
CONTEXT DEPENDENT TEXT TO BE PLACED HERE ...
2652
2656

FIG.26B

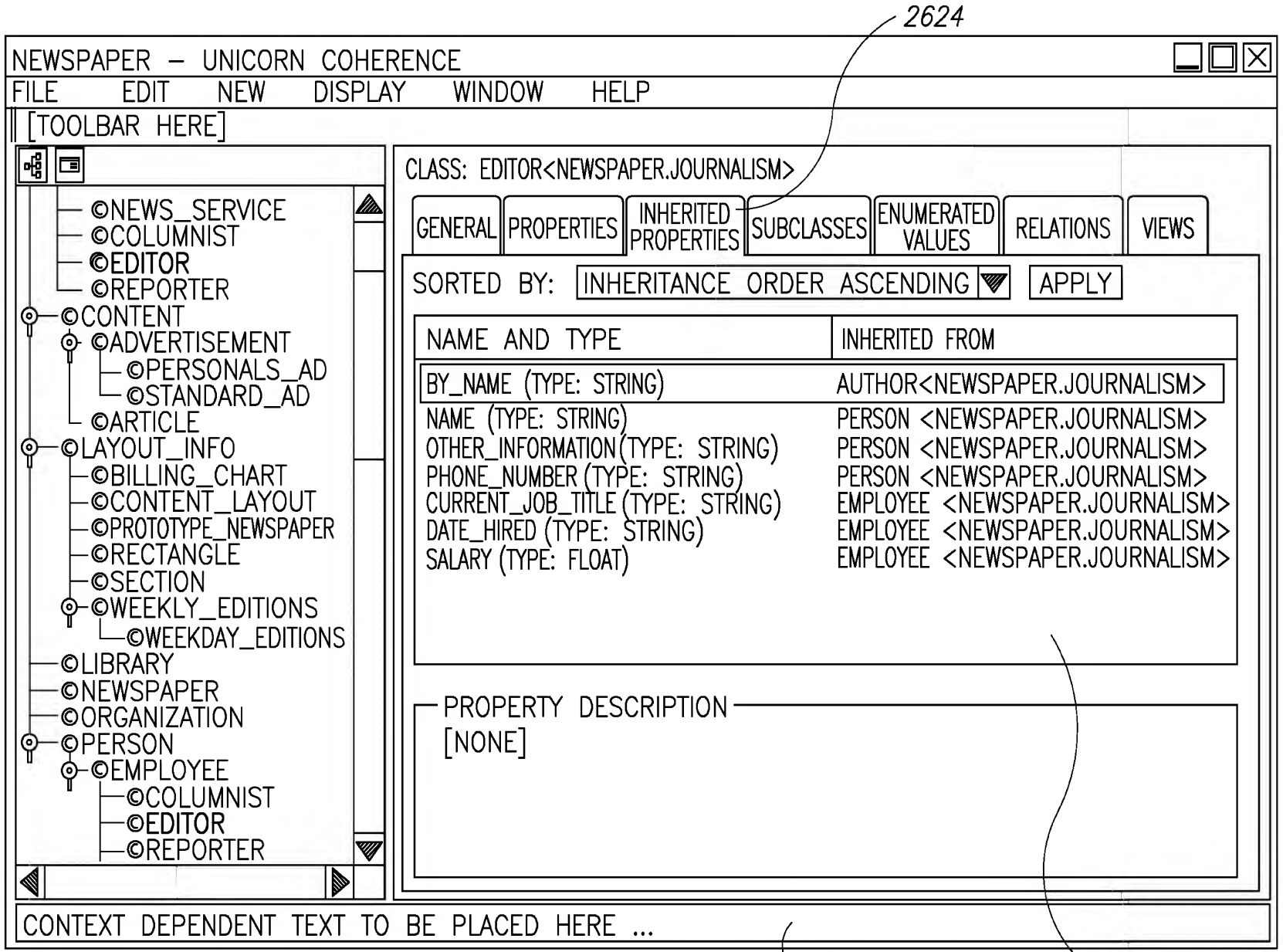

2624
NEWSPAPER – UNICORN COHERENCE
FILE EDIT NEW DISPLAY WINDOW HELP
[TOOLBAR HERE]
©NEWS_SERVICE
©COLUMNIST
©EDITOR
©REPORTER
©CONTENT
©ADVERTISEMENT
©PERSONALS_AD
©STANDARD_AD
©ARTICLE
©LAYOUT_INFO
©BILLING_CHART
©CONTENT_LAYOUT
©PROTOTYPE_NEWSPAPER
©RECTANGLE
©SECTION
©WEEKLY_EDITIONS
©WEEKDAY_EDITIONS
©LIBRARY
©NEWSPAPER
©ORGANIZATION
©PERSON
©EMPLOYEE
©COLUMNIST
©EDITOR
©REPORTER
CLASS: EDITOR<NEWSPAPER.JOURNALISM>
GENERAL
PROPERTIES
INHERITED PROPERTIES
SUBCLASSES
ENUMERATED VALUES
RELATIONS
VIEWS
SORTED BY: INHERITANCE ORDER ASCENDING
APPLY
NAME AND TYPE
INHERITED FROM
BY_NAME (TYPE: STRING)
AUTHOR<NEWSPAPER.JOURNALISM>
NAME (TYPE: STRING)
PERSON <NEWSPAPER.JOURNALISM>
OTHER_INFORMATION (TYPE: STRING)
PERSON <NEWSPAPER.JOURNALISM>
PHONE_NUMBER (TYPE: STRING)
PERSON <NEWSPAPER.JOURNALISM>
CURRENT_JOB_TITLE (TYPE: STRING)
EMPLOYEE <NEWSPAPER.JOURNALISM>
DATE_HIRED (TYPE: STRING)
EMPLOYEE <NEWSPAPER.JOURNALISM>
SALARY (TYPE: FLOAT)
EMPLOYEE <NEWSPAPER.JOURNALISM>
PROPERTY DESCRIPTION
[NONE]
CONTEXT DEPENDENT TEXT TO BE PLACED HERE ...
2660
2664

FIG.26C

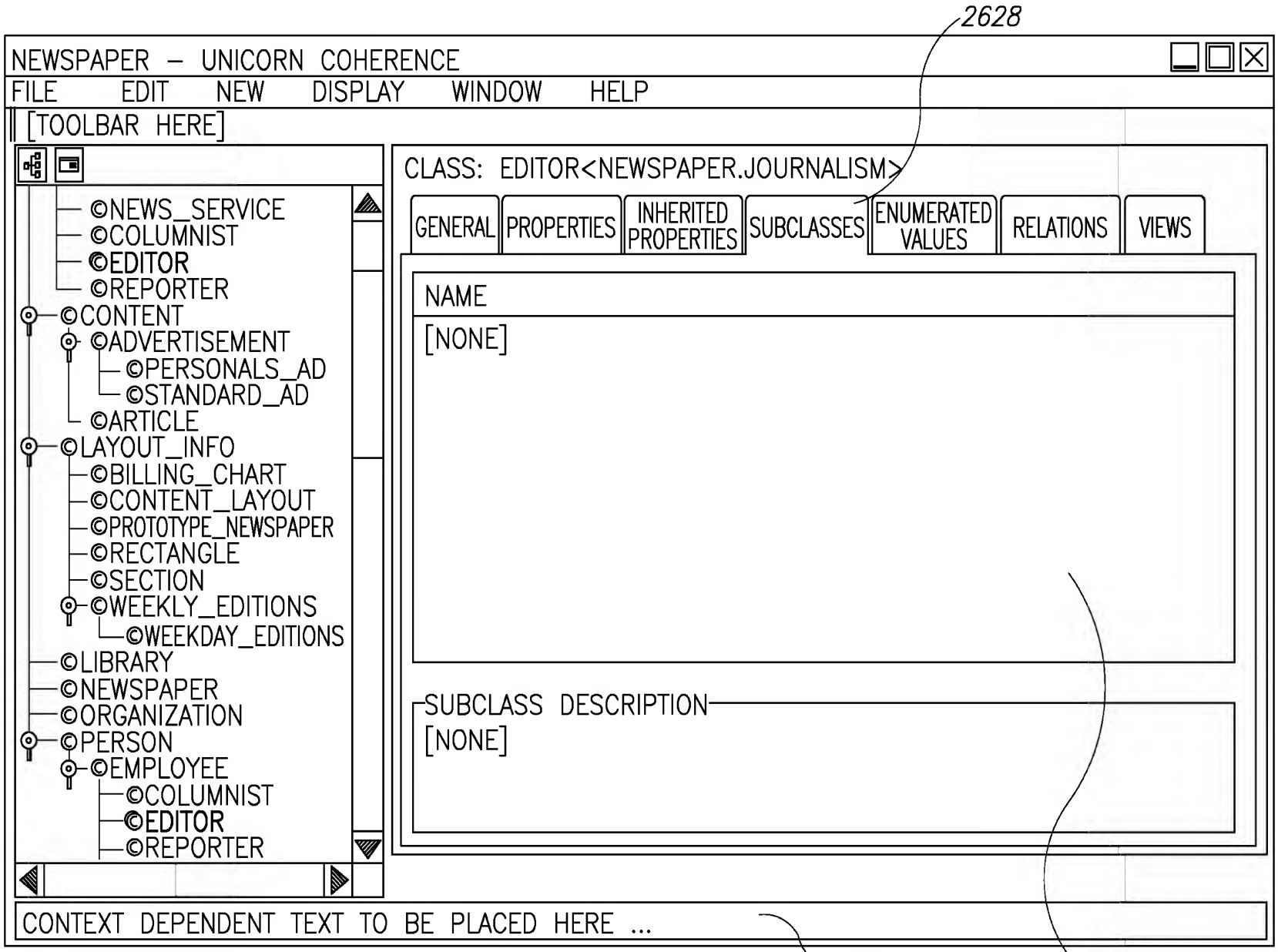

2628
NEWSPAPER – UNICORN COHERENCE
FILE EDIT NEW DISPLAY WINDOW HELP
[TOOLBAR HERE]
©NEWS_SERVICE
©COLUMNIST
©EDITOR
©REPORTER
©CONTENT
©ADVERTISEMENT
©PERSONALS_AD
©STANDARD_AD
©ARTICLE
©LAYOUT_INFO
©BILLING_CHART
©CONTENT_LAYOUT
©PROTOTYPE_NEWSPAPER
©RECTANGLE
©SECTION
©WEEKLY_EDITIONS
©WEEKDAY_EDITIONS
©LIBRARY
©NEWSPAPER
©ORGANIZATION
©PERSON
©EMPLOYEE
©COLUMNIST
©EDITOR
©REPORTER
CLASS: EDITOR<NEWSPAPER.JOURNALISM>
GENERAL
PROPERTIES
INHERITED PROPERTIES
SUBCLASSES
ENUMERATED VALUES
RELATIONS
VIEWS
NAME
[NONE]
SUBCLASS DESCRIPTION
[NONE]
CONTEXT DEPENDENT TEXT TO BE PLACED HERE ...
2668
2672

FIG.26D

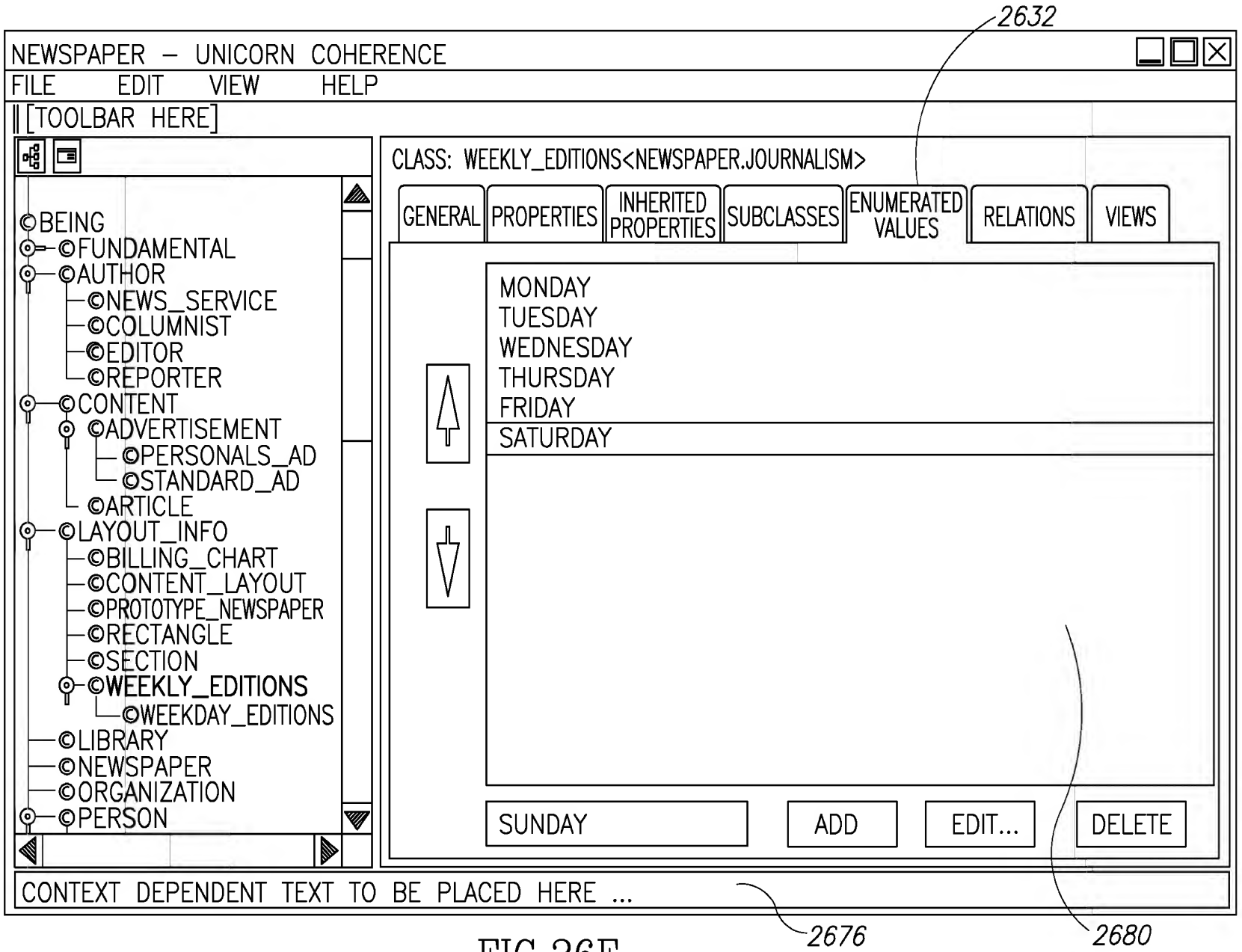
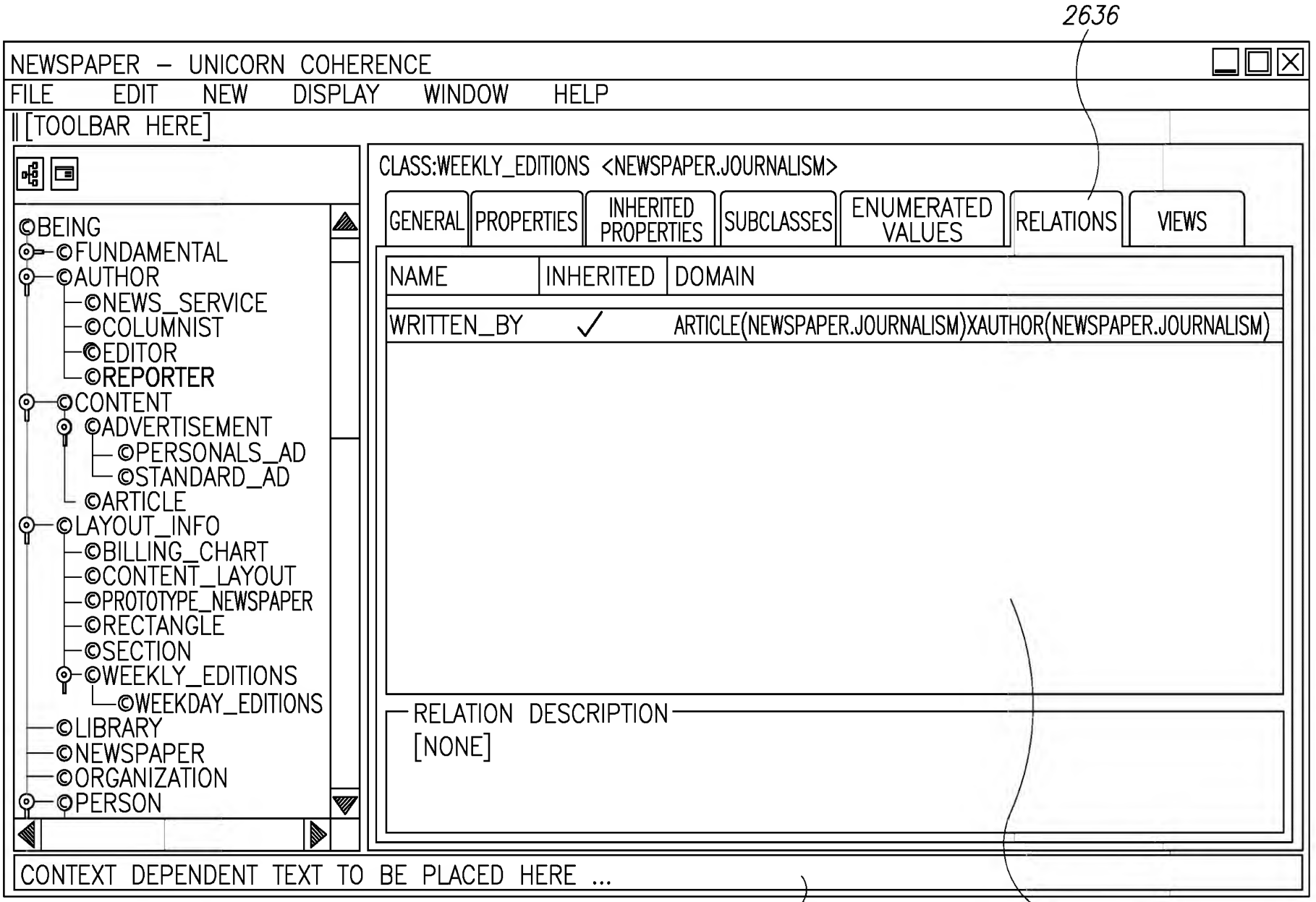

2632
NEWSPAPER – UNICORN COHERENCE
FILE EDIT VIEW HELP
[TOOLBAR HERE]
©BEING
©FUNDAMENTAL
©AUTHOR
©NEWS_SERVICE
©COLUMNIST
©EDITOR
©REPORTER
©CONTENT
©ADVERTISEMENT
©PERSONALS_AD
©STANDARD_AD
©ARTICLE
©LAYOUT_INFO
©BILLING_CHART
©CONTENT_LAYOUT
©PROTOTYPE_NEWSPAPER
©RECTANGLE
©SECTION
©WEEKLY_EDITIONS
©WEEKDAY_EDITIONS
©LIBRARY
©NEWSPAPER
©ORGANIZATION
©PERSON
CLASS: WEEKLY_EDITIONS<NEWSPAPER.JOURNALISM>
GENERAL
PROPERTIES
INHERITED PROPERTIES
SUBCLASSES
ENUMERATED VALUES
RELATIONS
VIEWS
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY
ADD
EDIT...
DELETE
CONTEXT DEPENDENT TEXT TO BE PLACED HERE ...
2676
2680

FIG.26E


2636
NEWSPAPER – UNICORN COHERENCE
FILE EDIT NEW DISPLAY WINDOW HELP
[TOOLBAR HERE]
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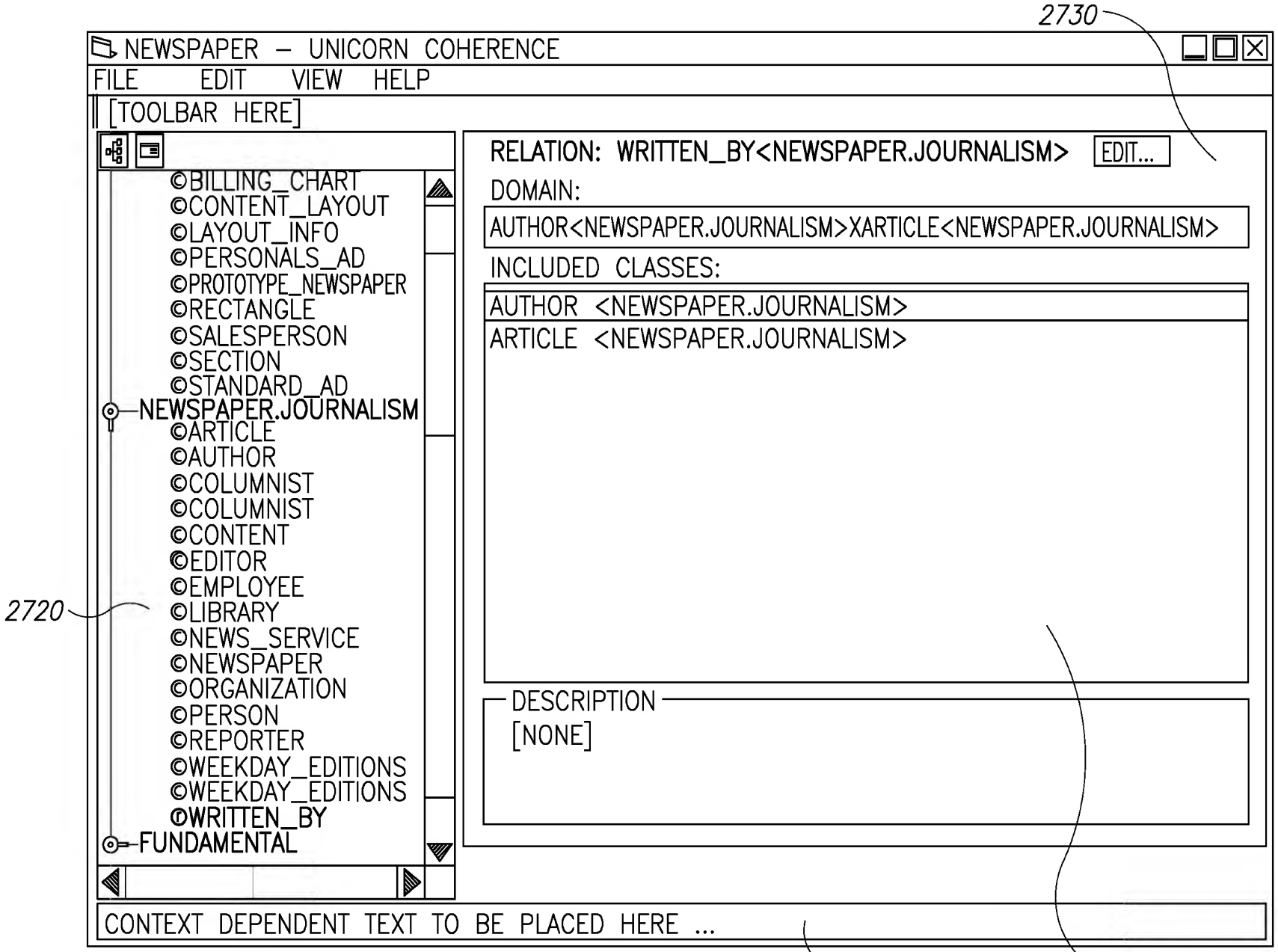
©RECTANGLE
©SECTION
©WEEKLY_EDITIONS
©WEEKDAY_EDITIONS
©LIBRARY
©NEWSPAPER
©ORGANIZATION
©PERSON
CLASS:WEEKLY_EDITIONS <NEWSPAPER.JOURNALISM>
GENERAL
PROPERTIES
INHERITED PROPERTIES
SUBCLASSES
ENUMERATED VALUES
RELATIONS
VIEWS
NAME
INHERITED
DOMAIN
WRITTEN_BY
✓
ARTICLE(NEWSPAPER.JOURNALISM)XAUTHOR(NEWSPAPER.JOURNALISM)
RELATION DESCRIPTION
[NONE]
CONTEXT DEPENDENT TEXT TO BE PLACED HERE ...
2684
2688

FIG.26F


2730
NEWSPAPER – UNICORN COHERENCE
FILE EDIT VIEW HELP
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©CONTENT_LAYOUT
©LAYOUT_INFO
©PERSONALS_AD
©PROTOTYPE_NEWSPAPER
©RECTANGLE
©SALESPERSON
©SECTION
©STANDARD_AD
NEWSPAPER.JOURNALISM
©ARTICLE
©AUTHOR
©COLUMNIST
©COLUMNIST
©CONTENT
©EDITOR
©EMPLOYEE
©LIBRARY
©NEWS_SERVICE
©NEWSPAPER
©ORGANIZATION
©PERSON
©REPORTER
©WEEKDAY_EDITIONS
©WEEKDAY_EDITIONS
©WRITTEN_BY
FUNDAMENTAL
2720
RELATION: WRITTEN_BY<NEWSPAPER.JOURNALISM>
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DOMAIN:
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INCLUDED CLASSES:
AUTHOR <NEWSPAPER.JOURNALISM>
ARTICLE <NEWSPAPER.JOURNALISM>
DESCRIPTION
[NONE]
CONTEXT DEPENDENT TEXT TO BE PLACED HERE ...
2710
2740

FIG.27

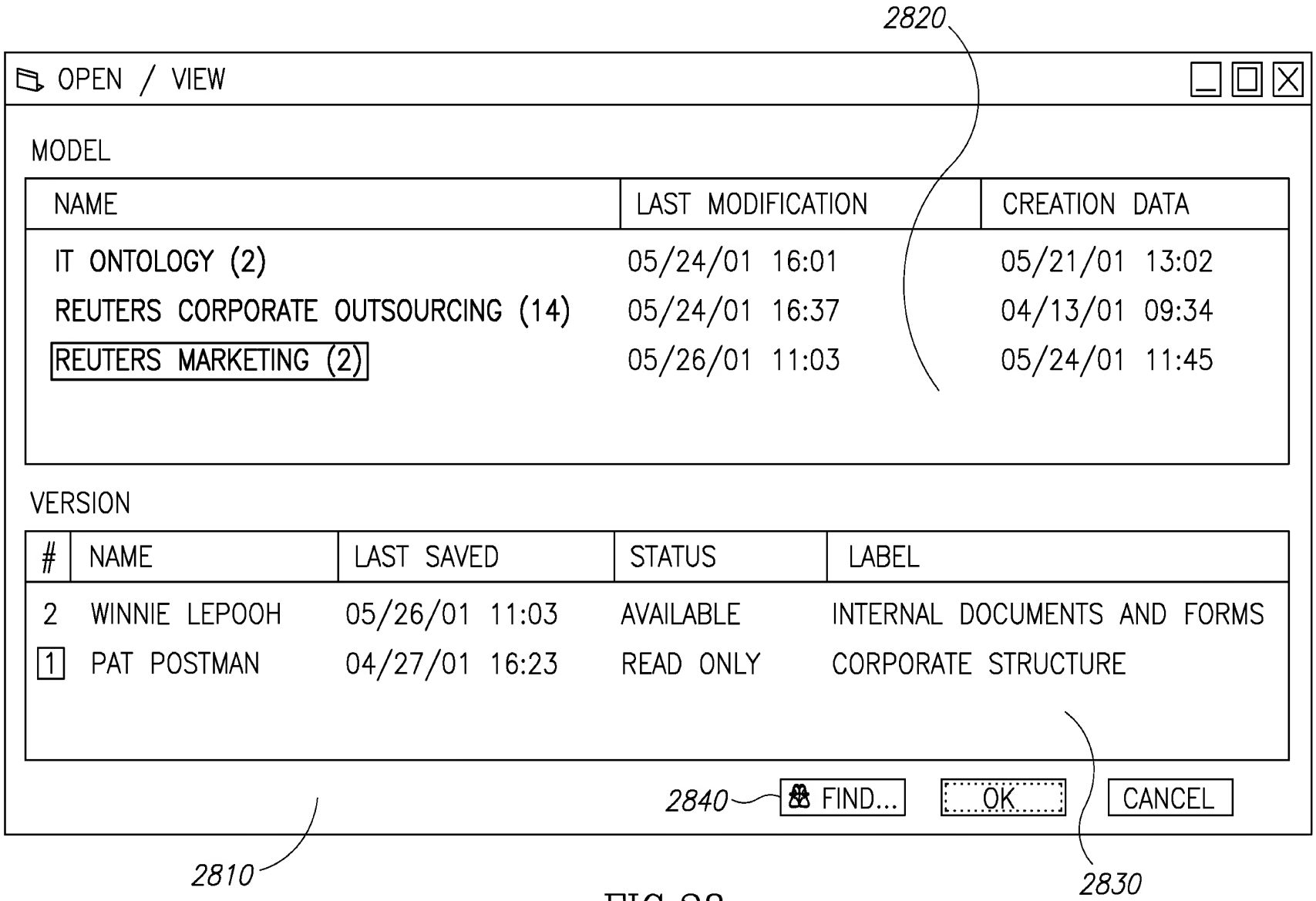
2820
OPEN / VIEW
MODEL
NAME
LAST MODIFICATION
CREATION DATA
IT ONTOLOGY (2)
05/24/01 16:01
05/21/01 13:02
REUTERS CORPORATE OUTSOURCING (14)
05/24/01 16:37
04/13/01 09:34
REUTERS MARKETING (2)
05/26/01 11:03
05/24/01 11:45
VERSION
#
NAME
LAST SAVED
STATUS
LABEL
2
WINNIE LEPOOH
05/26/01 11:03
AVAILABLE
INTERNAL DOCUMENTS AND FORMS
1
PAT POSTMAN
04/27/01 16:23
READ ONLY
CORPORATE STRUCTURE
2840
FIND...
OK
CANCEL
2810
2830

FIG.28

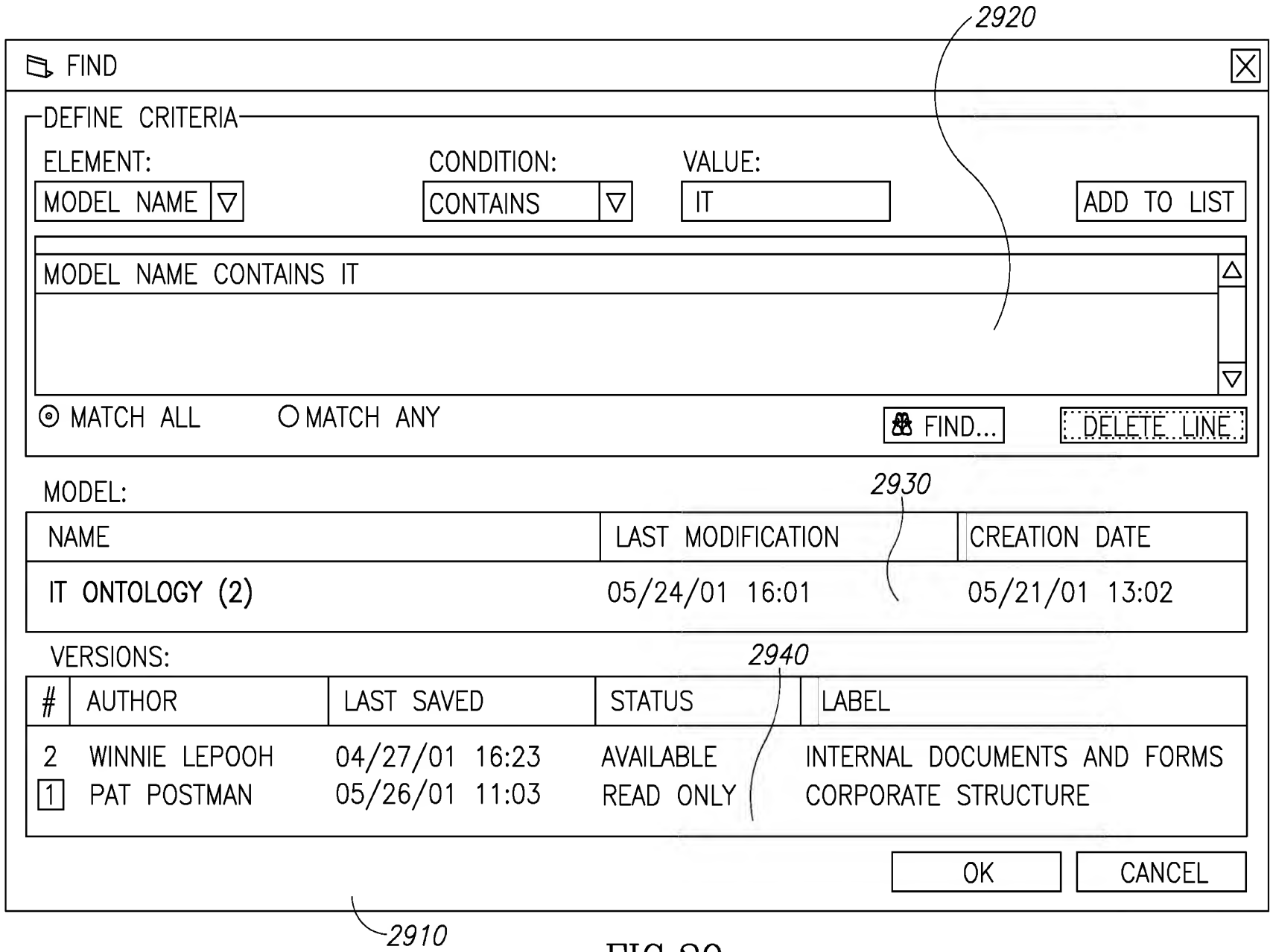
2920
FIND
DEFINE CRITERIA
ELEMENT:
MODEL NAME
CONDITION:
CONTAINS
VALUE:
IT
ADD TO LIST
MODEL NAME CONTAINS IT
MATCH ALL
MATCH ANY
FIND...
DELETE LINE
MODEL:
2930
NAME
LAST MODIFICATION
CREATION DATE
IT ONTOLOGY (2)
05/24/01 16:01
05/21/01 13:02
VERSIONS:
2940
#
AUTHOR
LAST SAVED
STATUS
LABEL
2 WINNIE LEPOOH 04/27/01 16:23 AVAILABLE INTERNAL DOCUMENTS AND FORMS
1 PAT POSTMAN 05/26/01 11:03 READ ONLY CORPORATE STRUCTURE
OK
CANCEL
2910

FIG.29

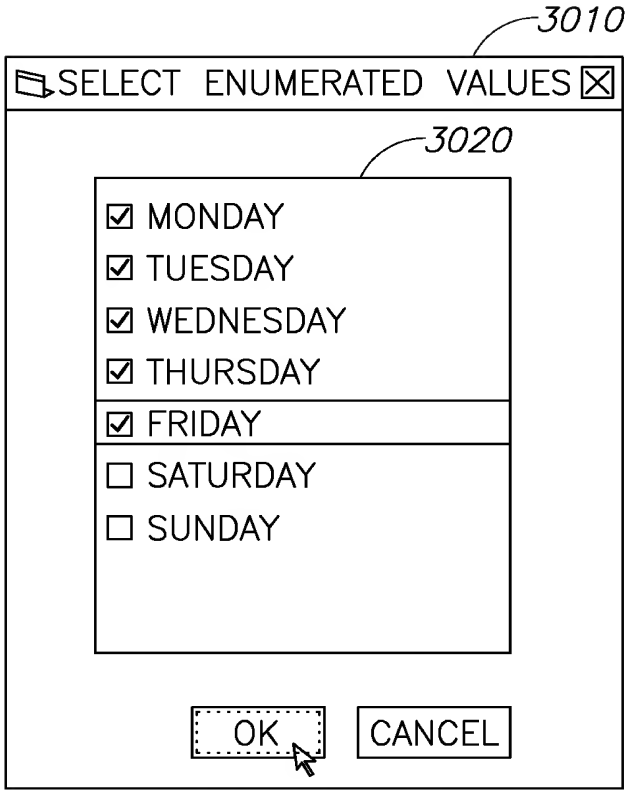

FIG.30A

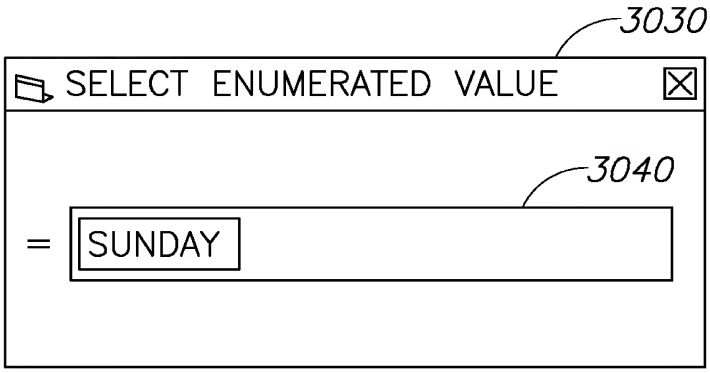

FIG.30B

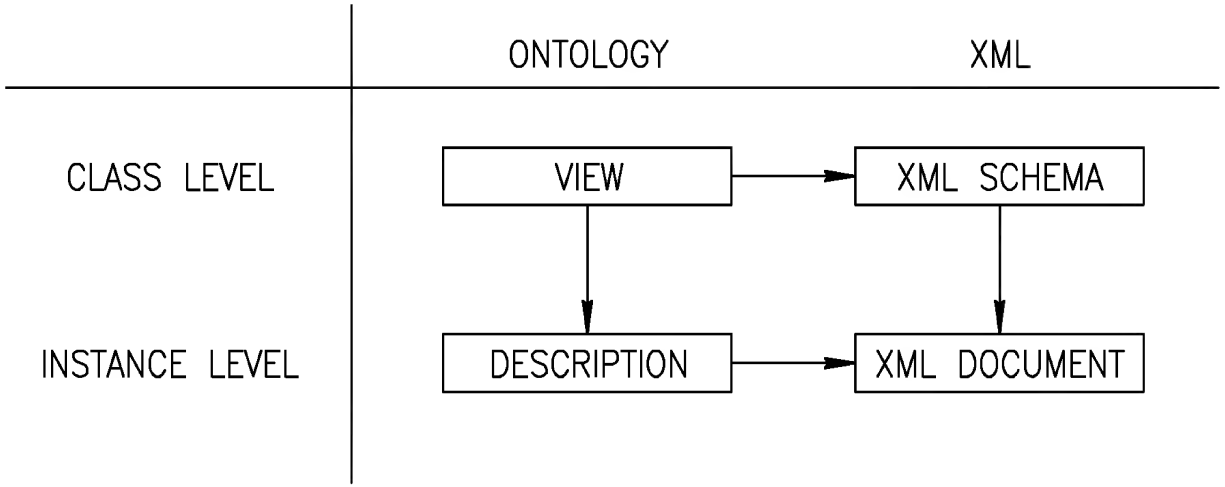
ONTOLOGY
XML
CLASS LEVEL
INSTANCE LEVEL
VIEW
XML SCHEMA
DESCRIPTION
XML DOCUMENT

FIG.31A

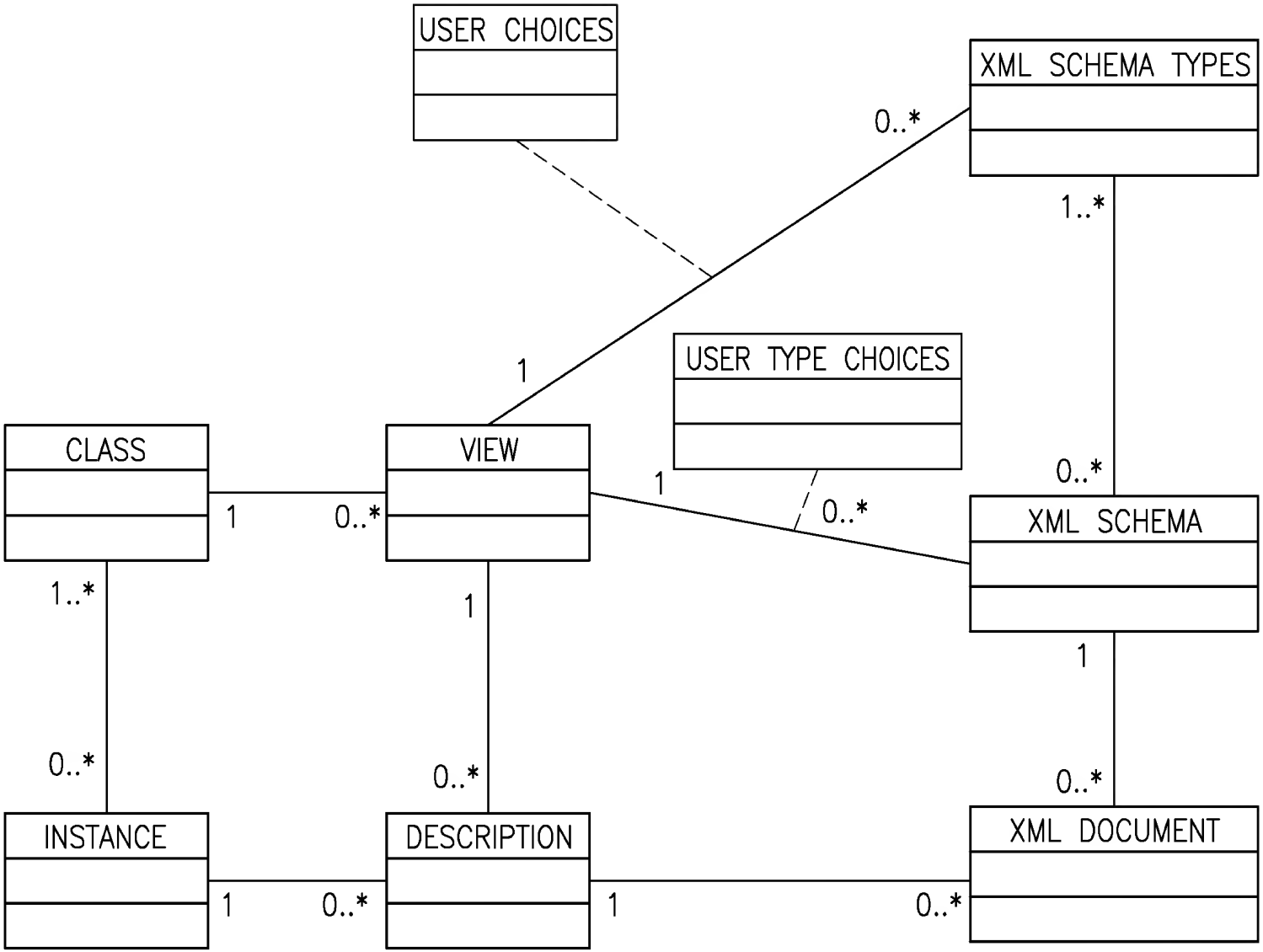
USER CHOICES
XML SCHEMA TYPES
0..*
1..*
1
USER TYPE CHOICES
CLASS
VIEW
1
0..*
1
0..*
0..*
XML SCHEMA
1..*
1
1
0..*
0..*
0..*
INSTANCE
DESCRIPTION
XML DOCUMENT
1
0..*
1
0..*

FIG.31B